



## Measurement of The Direction of The Cemetery Qibla of Jerukgiling Village, Kendal Regency

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**Abstract.** *This research was conducted by students of KKN MIT TEMATIK 103 in Jerukgiling Village in response to the village apparatus's request to measure the direction of the Qibla of the local village tomb. This measurement aims to determine the accurate direction of the Qibla on the tomb, which has never been measured before. Measurements were performed using a qualitative method with a theodolite tool and analyzed using the LP2IF – RHI Version 1.0 qibla direction calculator. The measurement results show that the direction of the Qibla of the tomb is 294° 33' 15.91". This finding is expected to benefit the people of Jerukgiling Village by helping them carry out religious traditions related to burials.*

**Keywords:** *Measurement, Qibla Direction, Tomb.*

### 1. BACKGROUND

The Qibla is the direction to the Kaaba in Mecca, the center of worship for Muslims worldwide. The direction of this Qibla is significant, not only in the implementation of prayers but also in various other aspects of worship, including funeral processions (Daud, 2018). In Islam, the body is obliged to be buried facing the Qibla as a form of final respect and obedience to religious commands. Accurate measurement of the direction of the Qibla is crucial, especially in ensuring that the body is buried by Sharia guidance. However, in some areas, knowledge and technology to determine the exact direction of the Qibla still need to be improved, as happened in Jerukgiling Village.

Jerukgiling Village is one of the villages located in an area with a majority Muslim population. However, although awareness of the importance of the Qibla is very high, the knowledge and technology available to determine the exact direction of the Qibla still needs to be improved. Previously, the people of Jerukgiling Village only used rough estimates or relied on the direction of the traditionally determined Qibla, such as following the direction of the village elder's grave. This results in uncertainty and inaccuracy in determining the direction of the Qibla, which, of course, can affect the validity of implementing religious traditions related to burial.

Responding to this problem, students of KKN MIT TEMATIK 103 from UIN Walisongo Semarang were asked by the village apparatus to measure the direction of the Qibla of the village tomb more accurately. This measurement is expected to provide clear guidance for the

community in implementing burial traditions by Islamic law. In addition, accurate measurements can increase public awareness about the importance of determining the right direction for Qibla.

In fiqh, not only prayer worship must face the Qibla, but in the case of a funeral of the dead facing the Qibla, it is something that must be carried out. Ulama agrees that facing the body towards the Qibla is mandatory. This is based on a hadith narrated by Abu Dawud. The Prophet PBUH said, "*The Kaaba is your qibla when you are alive and after death*" (HR. Abu Dawud).

## 2. THEORETICAL FOUNDATIONS

In the Islamic tradition, facing the body towards the Qibla at the time of burial is one of the obligations that must be fulfilled. The Prophet Muhammad PBUH himself has emphasized the importance of the Qibla in living and dead conditions through a hadith narrated by Imam Abu Dawud:

عن عمير ابن قتادة الليش – وكانت له صاحبة. قال رسول الله عليه وسلم: الكعبة قِبَلُكُمْ أحياءً وأمواتاً

"(The Kaaba is) your qibla, in a state of life and death." (H.R. Abu Dawud).

Shaykh Salim bin Sumair Al-Hadlrami in his book *Syafinatun Naja* mentions 4 things that can be the reason why a grave can be dismantled. In the book he said:

ينبش الميت أرباع خصال: للغسل إذا لم يتغير ولتوجيهه إلى القبلة وللمال إذا دفن معه وللمرأة إذا دفن جنيها معها وأمكنت حياته

It means: "A buried corpse may be exhumed again for four reasons: to bathe her if her condition has not changed, to face her towards the Qibla, because of the treasure that is buried with her, and if the corpse of a woman in her belly contains a fetus that can be lived." (Salim, n.d). Shaykh Wahbah al-Zuhaili, in his book *Fiqh al-Islami wa Adillatuhu* [II/1550], follows;

"It is obligatory, according to Shafi'iyyah and Hanabilah, to place the deceased in a state facing the Qibla, lean his face against the wall of Lahad, and block his back with bricks or something like that so that he does not lie on his back. Meanwhile, according to Malikiyyah and Hanafiyyah, all laws are sunnah."

From the explanation of the scholars above, it can be concluded that for most scholars of the Shafi'I School and the Hambali School, the law of facing the direction of the Qibla for the body is mandatory. Meanwhile, Imam Malik explained that putting the body towards the Qibla is sunnah, not obligatory, as he thinks about the insubordination of facing the 'ain Qibla in prayer. So, *ijtihad* is a must when determining the Qibla (Bashori, 2014)

### **3. METHODS**

This study uses a qualitative method with a field research approach. The tool used in the measurement is the theodolite, which allows the measurement of horizontal angles with high accuracy. Data was obtained through direct observation, interviews with village officials and religious leaders, and documentation during the measurement process. In addition, the measurement results were analyzed using the LP2IF-RHI Version 1.0 Qibla direction calculator, which utilizes geographical position data to determine the Qibla direction with high precision.

Sampling was carried out at the midpoint of the grave of Jerukgiling Village because this allows for consistent drawing of the direction of the Qibla throughout the grave area. The geographical coordinates of the tomb location are  $-7^{\circ} 1' 4''$  South Latitude and  $110^{\circ} 13' 29''$  East Longitude. The measurement was carried out on July 30, 2024, with the time selected based on the position of the sun to obtain more accurate results.

### **4. RESULTS AND DISCUSSION**

In Indonesia, where the majority of the population is Muslim, public cemeteries have a vital role in people's lives. Cemeteries are considered a final resting place and a form of respect for religious traditions and obligations that must be fulfilled. One of the most important elements in Islamic funeral traditions is ensuring that the body is buried facing the Qibla, the direction of the Kaaba in Mecca. However, inaccuracy in determining the direction of the Qibla is often a problem that is ignored, even though this obligation of shari'a must be enforced. This problem has become increasingly relevant in Jerukgiling Village, where a qibla direction measurement case study was carried out.

According to Mr. Makmun, as the Takmir of the Al-Muttaqin Mosque in Jerukgiling Village, the direction of the tomb in the Village had never been measured with an accurate method. The local community usually only uses references from the tombs of elders considered sacred or "*tripe alas*," namely the person who first cleared land in the area. This tomb is the tomb of Mbah Wijah, which is located around a large tree near the cemetery's entrance. However, the irregularity of the direction of the tomb is a problem because there is no definite record or knowledge about the direction of the Qibla from the tomb of Mbah Wijah. Only the previous generation probably knew the exact direction, and even the village elders today need accurate information. As a result, society today relies only on estimates and heartfelt convictions that the body has faced towards the Qibla, even without correct measurements.

This situation shows that there is still a lack of understanding among the public about the importance of proper measurement of the Qibla in funeral processions. The explanations of religious leaders involved in the measurement revealed that the local community tended to ignore the obligation to face the body towards the Qibla. Several factors cause this, including the need for adequate knowledge among religious leaders and the community about the importance of the right direction of the Qibla. In addition, there is a common perception that the direction of the Qibla is identical to the direction of the West in general, without realizing that the direction of the Qibla varies depending on the geographical location. Some people consider facing the body towards the Qibla as a recommendation rather than an obligation, so its implementation is often ignored (Ramadani, 2021).

Discussing the direction of the Qibla is none other than the issue of direction (Kaaba/Makkah). The direction of the Kaaba can be determined from any point on the Earth's surface by performing calculations and measurements. The direction of the Qibla is closely related to the geographical location of a place, namely how many degrees a place is from the equator, known as the latitude of the place, and how many degrees a place is from the longitude of the city of Makkah (Hasan, 2022).

In implementing the measurement of the direction of the Qibla in Jerukgiling Village, theodolite is used to determine the horizontal angle relative to the geographical north. Theodolite is an exact tool for measuring angles, so it is ideal for this purpose. The data obtained from these measurements were then analyzed using the LP2IF – RHI Version 1.0 qibla direction calculator. This calculator utilizes the geographical position data from the grave of Jerukgiling Village, located at the coordinates of  $-7^{\circ} 1' 4''$  South Latitude and  $110^{\circ} 13' 29''$  East Longitude. In addition, the position of the sun is also considered to obtain more accurate measurement results. The measurement results show that the direction of the Qibla in the grave of Jerukgiling Village is  $294^{\circ} 33' 15.91''$ . As a sign or symbol of the direction of this carefully calculated tomb, a sign was installed using two wooden sticks and a tombstone.

The accuracy of these measurements is critical, considering that the correct direction of the Qibla is one of the main requirements in the Islamic burial tradition. Burying a body that does not face the Qibla properly can be considered a violation of the obligations of Sharia so that it can reduce the value of the funeral procession in the eyes of religion. In addition, accurate measurements are also part of the moral and spiritual responsibility of the Muslim community to ensure that religious traditions are carried out as well as possible.

As part of the field research, the results of these measurements were also validated through interviews with local religious leaders, including Ustadz Sodik, who expressed their

support for the implementation of this activity. This validation is critical to ensure that the results of the measurements are accepted and appreciated by the local community so that they can be implemented in daily practice. Ustadz Sodik and other religious leaders are expected to act as liaisons between the results of this research and the community so that understanding the importance of the direction of the Qibla in funerals can be disseminated and practiced consistently in Jerukgiling Village.

With the results of this accurate measurement, it is hoped that the people of Jerukgiling Village can carry out the funeral procession with the guidance of Islam. In addition, this activity is also expected to increase public awareness of the importance of using modern technology in determining the direction of the Qibla so that mistakes that may have occurred in the past can be corrected and not repeated in the future. Accurate measurements are also the basis for improving cemetery governance in the Village to create a more orderly and Sharia environment.

## 5. CONCLUSION

The measurement of the direction of the Qibla in the grave of Jerukgiling Village by students of KKN MIT TEMATIK 103 succeeded in determining an accurate direction, which is  $294^{\circ} 33' 15.91''$ . This result is expected to be a reliable guide for the community in carrying out burials by Islamic guidance. This research emphasizes the importance of using technology such as theodolite to ensure precision and educate the public about the importance of the right direction of the Qibla in funeral processions.

The collaboration between students and the community in this research shows how science can be applied to solve problems faced practically. With accurate measurement results, the burial tradition in Jerukgiling Village can be carried out better by Islamic law and provide peace of mind for the community in carrying out their religious rituals.

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