Challenges and Hesitations in Utilising Waqf Well Water in Malaysia: Insights from Kampung Baharu Jerantut's Waqf Well Water Initiative

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ABSTRACT

This study explores the challenges and hesitations associated with the utilization of waqf well water in Kampung Baharu Jerantut, Pahang Malaysia. Through survey data analysed using SPSS, key barriers to effective adoption were identified, including limited community awareness, concerns over water quality, and inadequate infrastructure. The research highlights the significant role of community engagement, governance structures, and educational initiatives in influencing perceptions and participation rates. Findings reveal that a substantial proportion of the population remains unaware of the waqf water initiatives, with many expressing doubts about water quality and accessibility. Concerns about the long-term sustainability of these projects further hinder community involvement. The study emphasizes the importance of targeted interventions such as awareness campaigns, improved infrastructure, and participatory governance to enhance the effectiveness of waqf water programs. Recommendations include strategic educational efforts to boost community knowledge, investment in infrastructure to address physical and economic barriers, and fostering active community participation through capacity-building initiatives. The findings underscore the need for a comprehensive, community-cantered approach to ensure the long-term viability and success of waqf well water initiatives in Malaysia.

Keywords: waqf water, community engagement, challenges and hesitations, sustainable water initiatives, accessibility

INTRODUCTION

Access to clean water is a fundamental necessity, yet many communities face challenges in securing reliable water sources. Waqf well water initiatives have emerged as a potential solution, leveraging Islamic philanthropic principles to provide sustainable water resources. Despite these efforts, utilization rates remain inconsistent, with hesitations rooted in perceived quality, accessibility, and community engagement. Understanding these barriers is crucial for enhancing the effectiveness of waqf water programs.

The significance of clean water extends beyond health to include social, economic, and cultural dimensions. For example, the United Nations' Sustainable Development Goal (SDG) 6 emphasizes ensuring availability and sustainable management of water for all (United Nations, 2015). However, the implementation of initiatives like waqf wells often faces logistical and societal challenges. This study aims to identify the key challenges and hesitations preventing communities from fully benefiting from waqf well water. The research is guided by survey data collected from a sample population, offering insights into perceptions of water quality, access, and the role of community involvement.

The findings of this article have an impact on enhancing the understanding of challenges and barriers to accessing clean water through waqf well initiatives. Additionally, this study contributes to the development of more inclusive policies, sustainable water resource management strategies, and strengthening community

engagement to ensure the effectiveness of waqf water programs. The implications of this research can also serve as a guide for authorities, non-governmental organizations (NGOs), and relevant institutions in planning and implementing more effective initiatives to meet the clean water needs of communities

LITERATURE REVIEW

Waqf Water Initiatives

Waqf, an Islamic endowment established for charitable purposes, has been widely adopted to address community needs, including water security. Historically, the practice of water waqf began during the time of Prophet Muhammad (PBUH) amidst a water crisis in Medina. In Medina, there was a sole well owned by a Jewish individual, known as the Well of Raumah (Muhammad Akhir & Mohd Yusof, 2024). The inhabitants of Medina had to queue to purchase clean water from the owner at exorbitant prices. Consequently, one of the companions of the Prophet, Saidina Uthman bin Affan (RA), made significant efforts to purchase the well for the collective benefit of the community (Aziz et al., 2022). This historical account underscores the role of water waqf as an initiative for sustainable clean water supply to communities.

Water waqf projects have been implemented in several ASEAN countries, including Malaysia, Cambodia, and Indonesia, demonstrating their effectiveness in providing affordable and sustainable water supplies (Yaacob et al., 2020). The initiative to introduce water filtration technology through water waqf has also gained attention. A field study conducted by the Mekong Institute (2023) highlighted the positive impacts of this system on community health. In Cambodia, the development of water waqf has successfully addressed water-related issues. Similarly, water waqf holds potential as a significant initiative in Malaysia. However, the effectiveness of these initiatives often relies on governance structures, funding mechanisms, and community participation (Sadeq, 2002).

In Malaysia, the development of water waqf has been undertaken by private agencies, the government, and the community through non-governmental organizations (NGOs). The Ministry of Energy Transition and Water Transformation (PETRA) is one of the key departments responsible for managing water resources. PETRA has collaborated with external parties to ensure water security and sustainability. In the context of water waqf development, PETRA has partnered with the Malaysian Waqf Foundation (YWM), a department overseeing waqf affairs in Malaysia. YWM is responsible for promoting and collecting waqf funds from the community for water waqf development projects (Mohamad Akhir et al., 2024).

The development and construction of water waqf projects have shown significant growth, benefiting communities, especially in rural areas, as an initiative to ensure access to clean water. According to the official portal of YWM, nine out of Malaysia's 14 states have benefited from water waqf projects. As of December 2023, the state with the highest number of projects is Kedah (21 projects, RM877,464), followed by Kelantan (16 projects, RM736,081) and Pahang (11 projects, RM571,805). The total collection for water waqf funds stands at RM4,560,738.61, reflecting heightened community awareness of charitable initiatives (Yayasan Wakaf Malaysia Official Portal).

Additionally, NGOs and local universities have employed water well initiatives as alternative sources of water. Among these are the University of Malaya, University Tun Hussein Onn Malaysia (UTHM), Islamic Relief Malaysia, and Serantau Muslim (Md. Khalid et al., 2021). Furthermore, local communities have also taken the initiative to construct water waqf projects through mosque institutions, such as Masjid al-Busyra, Merbok, Kedah (Mohamad Akhir et al., 2024).

Barriers to Clean Water Access

Water is a vital resource for sustaining quality of life. However, water issues have become both global and local concerns, particularly in ensuring the adequacy of clean water supplies. According to a study by Md. Khalid et al. (2021), challenges to global water adequacy include climate change, water pollution, conflicts, poverty in developing countries, and geographical factors. Sukereman (2017) further highlights issues such as water pricing and distribution as additional concerns. In Africa, affluent communities often have direct water pipelines to their homes, whereas underprivileged communities must travel long distances to access water supplies (Magugudi

Makgatho & Elias Musitha, 2024). Gleick (2003) identifies the affordability of water infrastructure as a critical factor for low-income communities. Similarly, Hanjra and Qureshi (2010) emphasize the connection between water scarcity and socio-economic inequalities, underlining the need for inclusive policies.

In Malaysia, the primary water source is river water, accounting for 97%, while 3% comes from groundwater sources (Md. Khalid et al., 2021). River water is treated and processed before being supplied to the public. However, issues arise due to significant river pollution caused by lax enforcement. Furthermore, Bakar & Rahman (2021) point out that river pollution, high water demand, and reliance on surface water sources pose challenges to ensuring sufficient water supplies in Malaysia.

The United Nations has established the Sustainable Development Goals (SDGs) as a global effort to eradicate poverty, protect the planet, and improve human well-being (United Nations, 2015). Malaysia has taken this issue seriously by outlining Strategic Action Plan 15 under the National Water Resources Policy, which identifies measures to adapt water resources to existing and emerging threats, such as climate change and natural disasters (National Water Resources Policy, 2012). One of the initiatives to ensure clean water supply is the development of water waqf by applying waqf well systems.

Community Involvement

Active community participation is a cornerstone of successful waqf projects. Methods such as participatory planning and stakeholder engagement have proven effective in fostering sustainable outcomes (Pretty, 1995). However, as noted by Hasan et al. (2015), many communities lack the necessary awareness and motivation to actively participate in waqf programs. Educational campaigns and capacity-building initiatives are recommended to bridge this gap.

One of the challenges in engaging community members with waqf projects is the general lack of knowledge on how waqf works and what its benefits are. This is especially true for certain communities today. As noted by Sadeq (2002), most modern societies tend to have superficial or rudimentary understanding of the waqf model and often rely heavily on other people to administer the waqf instead of actively participating in the process. As stated in Cizakca (2011), the historical success of waqf institutions was mainly due to community engagement and self-managed social contribution endowments which are non-existent today. This clearly illustrates the importance of education programs regarding waqf and how it can contribute socio-economically (Mohsin 2019).

In addition to educational initiatives, motivation is a crucial factor in assisting communities to participate in waqf activities. Studies show that perceived benefits, both spiritual and economic, have a huge effect on an individual's willingness to participate in waqf activities (Yaacob et al., 2015). On the flip side, lack of personal motivation can be a great hindrance. Hence it becomes very important to utilize and exaggerate the benefits that waqf can have on a community. One potential solution is the use of community-oriented cash waqf and microfinance waqf initiatives hull (Ismail et al 2015).

One key area identified by Ibrahim and Sherif (2018) to assist with engagement and participation is the use of capacity training and development programs targeting waqf managers and other community developers. As noted by Marzuki et al (2020), this refers to some initiatives like training, leadership development and information forums which are supposed to aim at enabling people to effectively contribute to waqf projects. Similarly, the use of new technologies like blockchain and crowdfunding in waqf management has been advocated for with the aim of improving efficiency, transparency and accountability in waqf management (Shaikh et al., 2021; Ahmed et al., 2022). Another very important factor is that the community involvement in waqf projects the governance structure of waqf institutions plays a vital role in the effective functioning of these institutions (Abdul Karim, 2010).

Prior researchers have found that poor governance breeds corruption while mismanagement results to tendering ineffectiveness au chi to the community's distrust and lack of engagement in waqf's endeavours (Hasbullah et al., 2019). To avoid such challenges, there is a need to develop a set of universal regulatory frameworks alongside rigid control mechanisms to promote an enabling environment for community driven waqf initiatives. Social capital and collective action are also factors that determine the sustainability of waqf projects. According to Putnam (2000), social networks and trust as forms of social capital enhance civic and social actions. Studies

exploring waqf management also show that social capital and trust in waqf managers positively correlate with level of participation (Hassan & Noor, 2021). Therefore, there is a need to foster a culture of openness and trust in order to increase the community's participation in the long term.

RESEARCH METHODOLOGY

The research methodology for this study was designed to explore the challenges and hesitations surrounding the utilization of waqf well water in Kampung Baharu Jerantut. A quantitative research approach was adopted, utilizing structured surveys to gather data from the target population. This approach was selected to provide measurable and statistically analysable insights into community perceptions, participation levels, and barriers related to waqf water initiatives, consistent with best practices in social science research (Creswell, 2014).

Data Collection

Data were collected through a structured questionnaire distributed to 43 respondents actively involved or familiar with waqf well water initiatives. The questionnaire was designed to assess key variables such as perceptions of water quality, accessibility issues, community involvement, and awareness levels. It employed a Likert scale to measure the intensity of respondents' attitudes and opinions, providing a nuanced understanding of the factors influencing the utilization of waqf well water. Demographic data, including age, gender, educational background, and employment status, were also collected to contextualize the findings and identify potential correlations between socio-demographic factors and perceptions.

The questionnaire was administered after the weekly Friday prayer at Kampung Baharu's Mosque via purposive sampling. This is to ensure that the respondents who were selected for the study belonged to the congregation.

Data Analysis

The collected data were analysed using the Statistical Package for the Social Sciences (SPSS), which facilitated the application of descriptive and inferential statistical techniques. Descriptive statistics, such as frequencies, percentages, means, and standard deviations, were used to summarize the demographic characteristics and key response patterns. To ensure the reliability and internal consistency of the survey instrument, Cronbach's Alpha was calculated, with a threshold of 0.7 considered acceptable for social science research (Nunnally & Bernstein, 1994).

Additionally, frequency analysis was conducted to identify prevailing trends and challenges associated with waqf well water utilization. This was complemented by cross-tabulation techniques to explore relationships between demographic variables and respondents' perceptions. The methodology was guided by rigorous standards to ensure the validity and reliability of the findings, providing a robust foundation for the study's conclusions and recommendations.

FINDINGS AND RESULTS

Demographics

The respondents were predominantly male (67.4%) and aged 51-60 years (58.1%). Most were married (60.5%) and had varying levels of education, with 34.9% holding "other" qualifications. Employment statuses included self-employment (44.2%) and unemployment (41.9%).

Table I Main Challenges and Hesitations in Utilizing Waqf Well Water.

Variable	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Waqf Water Quality	32.6	16.3	11.6	4.7	14.0
Accessibility to Waqf Wells	37.2	9.3	11.6	11.6	7.0

Community Involvement in Waqf	32.6	16.3	25.6	9.3	7.0
Long-term Sustainability	20.9	18.6	25.6	9.3	11.6

Based on the results presented above, several key findings were identified:

Awareness and Perception

51.2% of respondents were unaware of the waqf water initiatives, with many doubting its quality and benefits. This aligns with findings from Hasan et al. (2015), who highlight the role of awareness in promoting participation.

Concerns About Water Quality

In Kampung Baharu Jerantut, the community has serious concerns about the quality of the water from the waqf well. The statement that the water fulfils acceptable quality criteria is entirely disagreed with by a sizable majority of respondents (32.6%), while 16.3% also voiced discontent. According to these statistics, nearly 50% of the people polled believe that the water quality is insufficient. Conversely, just 18.7% of respondents (strongly combined and agree) give water quality a good rating. This result is in line with earlier research by Azman et al. (2020), which showed that sustaining water quality is a problem for many rural water efforts, frequently because of insufficient filtering equipment and insufficient routine water testing.

Accessibility

Geographic distance and insufficient infrastructure were cited as significant hurdles. Gleick (2003) underscores the importance of addressing physical and economic barriers to water access.

Issues with Accessibility

One of the initiative's biggest challenges is getting to the Waqf wells. 9.3% of participants hold this opinion to a lesser degree, whereas more than a third (37.2%) strongly disagree that the wells are freely accessible. Well availability or physical access may be a major obstacle for the community, as evidenced by the 18.6% of respondents who agreed with well accessibility. These findings are in line with those of Ismail and Nor (2019), who discovered that in rural Malaysia, logistical obstacles like distance and inadequate infrastructure frequently make it difficult to access water services. In order to increase accessibility, their study also emphasized the need of placing these amenities strategically.

Limited Community Involvement

The information also points to a low level of community involvement in the Waqf well project. Besides the 16.3% who think participation is lacking, a considerable number of respondents (32.6%) feel that the community is not engaged in any meaningful way. A lack of clarity or awareness regarding opportunities to engage could explain the significant 25.6% of respondents who remain neutral. These results align with Hasan and Sabris's (2021) study, which emphasized that a lack of planned engagement programs and insufficient communication frequently result in low community involvement in Waqf-based projects. The success of such programs also depends on encouraging beneficiaries to feel a feeling of ownership, according to the study.

Concerns About Long-Term Sustainability

The Waqf well initiative's long-term feasibility is a main cause of concern. 18.6% of respondents have queries about the initiative's durability, while a sizable percentage (20.9%) reject it completely. Additionally, 25.6% of respondents express no opinion, which can be a sign of hesitancy about the initiative's administration and planning. This conclusion is validated by research by Abdullah and Rahman (2020), who found that the feasibility of waqf projects in Malaysia is seriously threatened by a lack of competent management, economic limitations, and poor maintenance planning. Their research made clear how crucial strong governance and wise resource allocation are to the long-term feasibility of such programs.

These findings underscore the need for targeted interventions, such as awareness campaigns and improved management practices, to address the challenges identified.

CONCLUSION AND RECOMMENDATIONS

This study underscores critical challenges impeding the effective utilization of waqf well water in Kampung Baharu Jerantut. Key issues identified include limited community awareness, concerns about water quality, accessibility barriers, and doubts regarding the long-term sustainability of waqf water initiatives. Addressing these challenges is essential to improve the adoption and effectiveness of such programs.

The research findings reveal that low awareness levels significantly impact community engagement with waqf water projects. Many community members are either unaware of the existence of waqf water initiatives or lack sufficient understanding of their benefits. This knowledge gap creates a barrier to participation, as individuals are less likely to engage with programs they do not fully comprehend. Additionally, perceptions of poor water quality and limited accessibility further discourage utilization, as concerns about health risks and inconvenience outweigh the perceived advantages. These factors collectively contribute to low adoption rates, limiting the potential impact of waqf water initiatives on community well-being. The absence of active community involvement in decision-making processes also fosters a sense of detachment, reducing the likelihood of long-term project sustainability. Therefore, effective community engagement is crucial, as it not only fosters a sense of ownership but also ensures that projects meet the specific needs of beneficiaries.

To address these issues, enhancing awareness is fundamental to improving the utilization of waqf well water. Educational campaigns should be designed to increase understanding of the spiritual, social, and practical benefits of waqf water projects. These can be delivered through community workshops, school programs, religious gatherings, and local media outlets. By highlighting success stories and tangible benefits, these initiatives can inspire greater community interest and participation.

In addition to raising awareness, improving infrastructure is important to address physical barriers to water access. Investments should focus on developing and upgrading water facilities to ensure reliable supply and high water quality. This includes installing filtration systems, conducting regular maintenance, and implementing quality control measures. Enhancing the physical accessibility of waqf wells, such as through improved pathways and strategic well placement, can also encourage consistent use of waqf water resources.

Fostering community involvement is another key component. Participation can be encouraged through capacity-building programs that equip community members with the skills needed to manage and sustain these initiatives. Leadership training, volunteer programs, and the establishment of community committees can empower individuals to take ownership of projects. Involving community members in planning and implementation ensures that projects are responsive to local needs.

Next, strengthening governance structures is essential to build trust and ensure effective management. Transparent practices, clear roles, and accountability mechanisms enhance the credibility of waqf institutions. Partnerships with reputable organizations, regular audits, and open communication channels further promote integrity and transparency, securing the long-term success of waqf water initiatives.

Lastly, sustainability planning should be integral to waqf water initiatives. This involves developing strategies that address financial sustainability, resource management, and environmental impact. Financial planning can include diversifying funding sources and establishing endowment funds. Regular monitoring and environmentally sustainable practices can enhance the resilience of waqf water projects, ensuring their relevance over time.

Future research should adopt longitudinal and mixed-method approaches to assess the long-term impacts of these interventions. Comparative studies with waqf water projects in other regions can provide valuable lessons to refine and enhance management strategies. Ultimately, a holistic and community-cantered approach is key to maximizing the impact and sustainability of waqf well water initiatives.

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