Challenges in maintaining facilities in elderly Pondok Village environment

N A Salleh, Y Abdul Talib, K Ismail and K Alauddin

Department of Built Environment Studies and Technology, Faculty of Architecture, Planning and Surveying Universiti Teknologi MARA Perak Branch, 32610, Seri Iskandar, MALAYSIA

E-mail: noraini@uitm.edu.my

Abstract. Pondok originates from an Arabic wordal-funduq which implies a hostel, a transitory home or dormitories meanwhile in Indonesia, a pondok is known as pesantren and dayah. The function of the pondok house is to serve as a center for the study of Islam in the Muslim community that does not have a specific age limit and is allowed to all genders. But most pondok houses are occupied by senior citizens who want to study Islam. The construction and existence of pondok house including facilities provided are mainly used for religious activity. Due to lack of law and regulations to govern the development of Pondok Village (PV), it drives a few problems that are related to insufficient facilities provided which then causes poor performance in managing it. This paper is presenting on the preliminary study from two pondok sites located in Perak, Malaysia. This paper is sought to discover the barriers related to implementing sustainable facilities management to PV. An interview with the building operators and an observation of the facilities provided in the PV was conducted. The findings reveal that lack of financial, lack of knowledge and skill related to sustainability, lack of staff to manage the building and facilities, lack of technology and inconsistent guidelines implemented are the key barriers that contribute to the performance of PV facilities management. Thus, this research recommends the implementation of sustainable facilities management of PV to reduce the cost of operating, proper training to the staffs that manage the facilities in a better way, thus increase skill and knowledge. Finally, the regulatory body should take holistic action in providing a standardization of facilities that should be provided in PV development and management.

1. Introduction

The definition of Pondok in Malay can be referred as a humble small house usually built for a temporary purpose [1]. The term has been used for traditional Islamic education village to represent the nature of the village which comprises of small houses built surrounding the place of study. This system features three main elements, namely the teacher known as Tok Guru, students that reside at the pondok, and the talaqqi/halaqah system of learning. The Tok Guru is the leader of the Pondok
Village (PV). His specialty is in Islamic knowledge and has a special place in the eyes of the society. Therefore, a PV is usually a one man show center. The halaqah system is a system where students are required to sit in front of the Tok Guru in receiving knowledge. In Malaysia, PV is established under the concept of endowment for charitable and religious purpose (waqf) and trust. Under this concept the owner of the land or the trustee manages the land as a place for students and those who are interested to seek religious knowledge as well as providing an environment that suits the needs of the people. They may either build a small classroom or musalla in a piece of land owned by them or pledged by others on a basis of waqf. [2] explained that traditional Islamic education including PV has demonstrated its success which stands out in Malay regions. It is the backbone for the malay civilization and Islam. PV education has become the religious strength among the muslim-malay community, especially the elderly that need a better, quiet and peaceful lifestyle. Elderlies that stay in PV seek close relation with God as their final purpose of life. Basically, elderly who settle down in PV do not pay rent, but pay maintenance fee and utility bill. This PV system is unique in contributing religious education to the native and is irreplaceable. It depends on the comfort of the students because their learning is not exam orientated but is for the benefit of their soul and the community.

To date, a new PV concept shares a certain similar concept and practices with the concept of a retirement village (RV) as practiced in few countries like Australia and United Kingdom [3]. RV is described as management intensive operating businesses which happens to have real estate component. The most common pushing factors that were identified when living in an RV was health issues, the need for greater assistance, death of spouse, and the need for a lifestyle change. The pulling factors that were identified includes the built environment and affordability, location and convenience of location, maintenance of existing lifestyle and familiarity. Similar to RV, PV requires the same needs, because it offers facilities as well as religious education that are suitable to the requirements of the people from a wide range of age. Unfortunately, the facilities that are offered in the PV area lack far behind compared to the RV concept. As reported by Sulaiman in New Straits Times dated 28 June 2017, three pondok in Kelantan have caught on fire. This includes hazard construction of huts, low quality of building materials and poor electrical wiring in buildings. Many PV built all over the state of Malaysia are built without consideration of climate and environmental impact, and there is a need for a strategic FM transformation to take place in order to align the development of PV with manageable and sustainable elements in future. The key challenge of managing PV is to ensure efficient and proper management practices to meet the demands from the society. The right management practices will contribute to improve PV performance as the element of facilities management (FM) is becoming critical. In relation to this, sustainable strategic FM is seen to be one of the best approaches that should be considered. FM is an umbrella term which covers various types of properties and user related functions [4]. Therefore, FM should not focus on optimizing the running costs of buildings, but also raising the efficiency and suitability of the management of space and other related assets management for people and processes. Good facilities are referring to level of functionality and durability of the facilities to facilitate the customers to perform their activities [5]. Hence it is important to further explore the challenges in managing building facilities in elderly PV.

2. Materials and methods
Methods, data and discussion in this article is based on the empirical material from a preliminary study found in past literatures and observations with semi structures interview to two PVs. This research is a funded research grant by Higher Education Ministry via Fundamental Research Grant Scheme (FRGS). Two types of methods are being used. For the first method, previous literature is critically analyzed to come out with new constructs. The second method is on site observation of two PV in Kuala Kangsar, Perak, namely Pondok Al-Mansur and Pondok Ar-Ridzuan Pondok Al-Mansur own by Badan Khidmat Masyarakat At-Toif (PAKAT) since 2003, while Pondok Ar-Ridzuan Al-Mizan was operated since 2000. Pondok Al-Mansur land was waqf by Hajjah Aishah Bt Abu Toif. Later, PAKAT bought a piece of land beside the original land then build 2 block
building for religious activities. Pondok Ar-Ridzuan was built at 8 acres land that bought using sedeqah/waqf fund. Meaning both land for this development are waqf land. These organisations are managed on voluntary basis by the tenant itself as they set a committee. In managing administrative matter, they hire 2 clerical staff. Both PV are located by the Sg Perak riverbank and its about 40km to Kuala Kangsar City Centre. Most residents are pensioner, elderly but self-dependant. There are two ways of data from observation namely, ticking the list of prepared check-list and photo taken. These two sites are similar in term of its operation, size and function. Six researchers act as an observer to these two sites. The items in the checklist are based on seven constructs that have been developed from literature review namely, (i) fund allocation, (ii) management and operation, (iii) space allocation, (iv) policy and regulation, (v) technology and equipment, (vi) maintenance process and (vii) building age. Data will be analyzed on the result of the observation and the relation on the seven constructs mentioned above. The advantages of physically observing the sites as well as engaging a semi-structure interview with the tenant and management team is that it leads to better understanding of how PV is managed, as well as to determine method of final survey.

3. Result and discussion
This section will discuss on seven constructs that were mentioned in the previous sub section. Barriers were found and discussed based on observation made by six researchers for two PV sites. Result of semi structures interview also discussed together with observation finding to validate the interpretation of the researchers.

3.1. Fund allocation
Most PV in Malaysia are confronting financial issues. The main financial resources for these ‘hut villages’ are still dependent on the contributions made by the society, in particular for unregistered PV, such as zakat, waqf, infaq and donations. Waqf is seen as a tool that can allow organisations to finance their own growth by comparing all four financial tools. However, not all PV have the capability to develop, generate and sustain their finances through waqf as they confront various difficulties [6].

From the observation of these two sites, problems can be found in managing the property due to lack of funding. There are two government bodies that give some fundings namely Majlis Agama Islam Negeri Perak (MAIPk) and Jabatan Kemajuan Islam Malaysia (JAKIM). The fundings are monthly allowance to the “siak” amounting RM300 per month by MAIPk) and yearly major maintenance cost by JAKIM (maximum RM200,000 yearly). This amount is based on claim and it is not guaranteed that the PV will receive the said amount as claimed. Other incomes are from public contribution (sedeqah) and monthly maintenance fee of RM80/month per head for Pondok Ar-Ridzuan and for Pondok Al-Mansur is RM100/month perhead. According to the study carried out by [11], PV in Malaysia depends on permanent resources like land and waqf buildings for the sustainability of the PV education. This statement is strengthened by [7] who performed a comparative study between PV in Malaysia and pondok pesantren in Indonesia. Therefore, some PV in Malaysia have deteriorated because they only get financial resources through the contributions of the Islamic community like donations, infaq, zakat and waqf other than allocations from government bodies that are based on the application they made. Due to the uncertain sources of financial, PV are facing difficulties in proving complete and comfortable facilities to the resident of PV. Therefore, this factor contributes to the barriers in implementing strategic facilities management in the PV.

3.2. Management and operation
Lack of fund allocation leads to the lack of management and operation. As the PV are mostly developed by individual or private organization, contribution of idea of development also comes from the person who owns the village without practicing the regulations required by the authorities. This is because, fees paid to the consultants for development of the PV development might be limited due to
the constraint of funds available. Annual or monthly operation cost are generated basically from sedaqah, waqf and minimal maintenance fee is charged to residents.

From the unstructured interview during observation on site, it was found that both sites are managed by voluntary manner whom stay permanently at the PV as residents. They are educated pensioners (teacher, engineer and government officer). Therefore, claim to the authorities made are not regular and person in charge are volunteer from the residents itself.

The managements are more on based on trust. Yet, it was found that the management of both PV are fairly good in terms of documentation of financial inflow and outflow. Besides, there are two permanent administrative staffs that work fulltime for each site. Besides, a few tok gurus were hired to basically focus on the core operation of the PV which is Islamic education. Most of the tok gurus are remunerated with a lower salary as compared to normal schools as they are paid under government agency. Despite the salaries offered to the teachers are lower, the teachers are willing to work and contribute their thoughts and knowledge to the students. Thus, lack in expertise and staff leads to the constraint in implementing strategic facilities management due to their thoughts and productivity that are contributing in achieving the best mission and vision of an organization [8].

3.3 Space allocation

Most of the PV are developed on the waqf land contributed by personal individual or another private organisation. According to [9], PV in Malaysia depend on permanent resources like land and waqf buildings for the sustainability of the pondok education. Due to this reason, most of the PV have limited space to extend their buildings or facilities. In certain cases of unregistered PV, there are only one or two blocks provided for learning and teaching activity. These blocks are used as a madrasah or surau where it is the place for teaching and learning as well as a hostel for their students. Since the blocks provided are limited, thus the other facilities will be combined in one place inside the buildings such as canteen, library, hostel and classroom. The messy arrangement of the facilities due to insufficient space leads to inconductive and uncomfortable place to study.

Besides, it was found that there is spacious space outdoor for site Ar-Ridzuan PV (refer Figure 1 (Plate 01 to 04). Figure 2 (Plate 05 to Plate 08) explained site Al-Mansur PV. Yet, it is not fully utilized. Some spaces can be converted into therapeutic recreational area for the elderly. Edible gardens can be invented to allow the PV residents to engage with useful activities in the afternoon and can save their money yet consume healthier food from their homegrown vegetables. [10] mentioned that design features enhance residents' connection to nature including access to water, wild-growing gardens, greenhouses, compost, climbing plants, blurred boundaries between natural and built elements, and information-rich construction systems. The same author also concluded that connection to nature may be enhanced in cohousing through informal practices and covert behavioural mechanisms not addressed in the present study, such as sitting in the common garden or playing with pets and farm animals in the community.

![Plate 01](image1.png) ![Plate 02](image2.png) ![Plate 03](image3.png) ![Plate 04](image4.png)

**Plate 01** Surrounding of Site Ar-Ridzuan PV.
3.4. Policies and regulation

Every organization has their own policies in order to ensure the organization is well operated. Despite the fact that each local authority has different objectives and standards, the owner of the PV is obligated to provide the facilities and services to build and support the sustainable facilities for their residents [8]. Inconsistent and unstandardized policies of every PV have caused the uneven strategies in managing the facilities in those villages.

From the unstructured interview during observation on site, it was found that local municipals are not engaged directly with the management of the PV because they did not pay yearly property tax. It is because the development of these PV did not apply for “Certificate of Completion and Compliance (CCC).” These cause many issues such as there are no rubbish collectors for these properties. Local council needs to take charge in order to encourage PV to embark into a conducive way of living. As mention by [11], cohousing is an innovative form of accommodation. It offers economic, environmental and social advantages over existing forms of development.

The municipality has to create an internal awareness about the growing interest for co-housing projects [12]. Therefore, it is very important that the management of the PV gains attention from local municipality in certain critical areas.

3.5 Technology and equipment

As the development of PV depends on the community’s donation and waqf, the selection of the equipment is based on cheapest price in order to control the budget of the maintenance and operation cost. Due to this reason, the equipment provided itself contributes to the obstruction in terms of quality and requires numerous maintenances.

From the observation, few problems were found in the area of facilities management. There are lacks in preparing proper utilities as well as no intention to invent sustainable elements in managing these two sites. For example, there are no proper garbage bins provided for individual units. Every unit dump their garbage at a manmade hole that has been dug earlier, Figure 3 (refer Plate 09 & 10). These dumping sites are dug to dump domestic garbage until its full, then it will be covered with soil and a new site will be dug. By then the holes are left unattended until its full. Only one site (Ar-Ridzuan PV) has a recycle cage but not properly managed and left unattended too. Plate 11 on Figure 3, shows a recycle cage that is not properly maintained. Al-Mansur PV site also uses the same method of disposing garbage but by the riverbank. They collect the garbage in big bins and volunteers’ tenant especially men will arrange time to dig and dispose the garbage. This open dumping site can cause aedes outbreak, smelly environment, flies, and spreading of rubbish by stray cats and dogs. [13] mentioned this kind of housing should encompass features such as solar energy and building with local materials, in a vernacular style, for natural conditioning (passive heating and cooling, daylighting, and natural ventilation), all features that promote awareness of natural systems among residents.
Toilet conditions are similar for both sites. Abulations are not well maintained and does not cater for the elderly, as there should be seats. There are also foreign materials like buckets, chairs, plastic pipes, and the height of the counter top is too high. No handrails provided as well as spaces are spacious. Brooms are left unattended and not properly kept. Figure 4 (Plate 12, 13, 14 and 15) shows the area is not properly maintained. Toilets and abulation are clean but not tidy with some baskets, brooms and mops that are left unattended. The countertops are a bit high for the elderly.

Plate 12: Abulation (Ar-Ridzuan PV)  Plate 13: countertop (Ar-Ridzuan PV)  Plate 14: Abulation (Al-Mansur PV)  Plate 15: Countertop (Al-Mansur PV)

**Figure 4.** Toilet and Abulation of Site Al-Mansur and Ar-Ridzuan PV.

### 3.6 Maintenance process

Appropriate identification of defects and the implementation of remedial measure based on the technical knowledge can contribute to effective building maintenance [14]-[5] has categorized the maintenance as predictable and avoidable; predictable maintenance is the regular periodical maintenance that carries out to retain the performance of the building and repair and replace the components while preventive maintenance is the maintenance required to rectify failures due to incorrect design and installation or faulty materials. Moreover, some researchers have also classified the maintenance management into planned and unplanned maintenance, which consists of many approaches [15].

Since PV is developed by individual or a group of people or a private organization, the maintenance planning is not being taken as a major need by taking into consideration of the financial status. Normally when minor defects occur, they will try to hold on the issue as long as the defects did not affect the users. Therefore, funds can be allocated for other things which are more important than repairing the minor defects identified. The concept is as long as the materials or facilities can be used, it will be used until the facilities are destroyed. Thus, this barrier identifies as one of the obstacles in managing the strategic facilities planning in PV. These sites have no proper schedule maintenance, only based on repair work done based on report. Therefore, some elements are left unattended like a broken or ripped door and broken tiles. A respective trader will be called to handle the repair work time to time based on the report. Backyards are left unattended too, as some areas may cause aedes
mosquito breeding. But, once a year, they arrange a team among residents to clean up the surroundings. This activity is called “gotong-royong”. However, a once a year “gotong-royong” activity cannot sustain the proper well-maintained surrounding and can degrade the function of the facilities provided. Tallied with what [16] have concluded, that most cohousing residential are less upkeep and maintenance are at a minimum because they may have some functional limitations.

Figure 5 (Plate 16 until 19) shows the level of maintenance and operation of facilities provided in both case studies. Plate 16 and 17 are from Ar-Ridzuan PV, meanwhile Plate 18 and 19 are from Al-Mansur PV. Backyard (plate 16) and perimeter drain (plate 17) are not properly maintained as well as its surrounding. Backyard for cloth-line purposes can be improvise and add more green surrounding like hydroponic edible garden. Ample space on backyard can be improvised by adding therapeutic surrounding such as stepping stone. Perimeter drain that has wild plants are degrading the function of perimeter drain where it can clog water if heavy rain. Plant also can cause damage to the cement render. As for Al-Mansur PV (plate 18 and 19), unit are not properly ventilated as its cover with mosquito net and laundry is operated at the front yard, which is not proper and the drain-pipe goes to perimeter drain. These facilities are necessity and high demand for daily used, therefore it need proper setup so it can improve the healthier lifestyles and increase happiness.

![Plate 16: Backyard, Plate 17: Perimeter drain, Plate 18: Unit of residence, Plate 19: Laundry at backyard](image.png)

**Figure 5.** The level of maintenance and operation of facilities provided in both case studies.

### 3.7. Building age
Historically, the pondok type of education began in Malaya at the beginning of the 19th century in the northern Malay states of Kelantan, Terengganu, Kedah and Perlis. It originated from Patani or Sumatera. PV education in Kedah is said to have originated from Sumatera while pondok in Kelantan and Terengganu came from Patani [17]. Consequently, the building of PV in Malaysia can mostly be categorized as old buildings although some of them have been partially or fully renovated. For example, some of the PV in Kelantan still maintains the original design which is constructed by wood elements. Thus, the building age itself contributes to the barrier in implementing effectiveness of facility management especially when the building itself maintains the original structural.

### 4. Conclusions
Based on the research identified and appraised, a transformation towards the management approach of PV facilities is needed. To ensure a high performance of PV Facilities Management, FM function should be integrated with sustainable factors that consider social, economic and environment aspect. It is important to establish the approaches to be used in measuring the effectiveness of the program through a comprehensive training that is related to facilities management skill and knowledge. Apart from that by having a clear policy and guidelines of how facilities management should be implemented in PV, it will enable to the operator in achieving management goals. The standards of facilities that should be provided in PV also need to be standardized by the regulatory bodies.
Therefore, the concept of the universal design principles can be implemented in all types of design that can be used by everyone. In relation to Universal Design, selected case studies suggested the necessary facilities should meet the requirements of household regardless of age, size, physical or ability. For example, toilet design for elderly should have an appropriate space, entrance and handrail [16]. The accessibility within the area and in a building is important for the elderly. As mentioned by [17], in Universal Design Index, there are six aspects to rate accessibility i.e. connectivity (15%) accessibility (25%), usability (20%), safety (20%), integrated design (10%) and operation and maintenance (10%) where the passing score is 65%. The six aspects need to interrelated to each other. The integration within the site, building location, landscape, car parking, rooms, living room, and kitchen are connected and linked to each other.

Community engaging the external organisation in the PV also play an important role in raising financial donation. By doing a closed monitor that engages the community in contributing ideas and an attractive activity with the cooperation of non-government organization of how this activity will increase financial funds for the facilities management activity does require a proper planning towards PV management. The economic benefit when using solar consumption will lower the energy bills in PV facilities. In the environment aspect a proper waste management has to be strategically planned.

There are some suggestions of improvement that can be done for PV, namely, (i) Engage with routine garbage collector to handle household garbage daily, (ii) Set a volunteer to manage recycle cage regularly by preparing a duty roaster , (iii) Engage with the NGO to set up a rain water harvesting concept for watering, etcetera, and (iv) Do more “gotong-royong” i.e. every second and fourth Saturday monthly. With these improvements, PV can become a favourite settlement place for pensioners or the elderly. [18] found that co-housing community can create a sense of belonging and trust and offer mutual support, meaningful activities, and a feeling of being needed, all of which feed into a sense of community. To conclude this discussion a wide-ranging plan should be formulated with highlighting the practice of sustainable Facilities Management of PV.

Acknowledgement
The authors are grateful to acknowledge and extend our gramery to FRGS Research Grant (FRGS/1/2019/UiTM/02/11), under Institutions of Higher Education Excellence Planning Division, Ministry of Higher Education collaborated with UiTM for funding this research, sponsored our participation in ICRP 2021.

References
[1] Lukman, A. (2011). Latest Development of Traditional Islamic Education in Kelantan. Paperwork presented at INTED 2011 Conference on 7-9 March 2011, Valencia, Spain
[2] Hassan, A.A (1980). The Development of Islamic Education in Kelantan.Kuala Lumpur. Persatuan Sejarah Malaysia
[3] S Sufian, A and Mohamad, N. A. (2013). Pondok System as A Model for Retirement Village in Malaysia:A Legal Perspective. Retrieved from http://frsh.upm.edu.my/alamcipta/index.php/alamcipta/article/view/111 2015 on 15 June 2020.
[4] Syahrul Nizam Kamaruzzaman and Emma Marinie Ahmad Zawawi, (2009). Development of facilities management in Malaysia., Journal of Facilities Management. Vol.8, pp. 75 – 81
[5] Maimunah, Zafirah & Ibrahim (2016). Key Drivers Of Sustainable Facilities Management (FM) Practice For Mosques In Malaysia, International Journal of Real Estate Studies, Volume 10 Number 1
[6] Farahdina & Zakaria (2018). Problems Faced By The Pondok Institutions In Funding Development, International Journal Of Academic Research In Psychology, pp. 1313-1320
[7] Hashim, R., Rufai, S. A., & Nor, M. R. M. (2011). Traditional Islamic education in Asia and Africa: A comparative study of Malaysia’s Pondok, Indonesia’s Pesantren and Nigeria’s traditional comparative Paperwork presented at Persidangan Serantau Kearifan Tempatan 2013 ‘Memperkukuhkan Kearifan Tempatan ke Arah Pengantarabangsaan’ 6-7 Oktober 2013,
Sutra Beach Resort, Terengganu

[8] Sylvia Gala Mong, Sarajul Fikri Mohamed, Mohd Saidin Misnan (2019). Budgeting: A Strategic Approach to Achieve Value for Money in Maintenance Management, *The European Proceeding of Social & Behavioural Sciences*, Vol. LXII-AIMC2018 pp. 331-340

[9] Ramli, M. I. & Bakar, M. Z. A. (2013). Kearifan tempatan dalam institusi sekolah pondok: Malaysia research case. *Paperwork presented at Persidangan Serantau Kearifan Tempatan 2013 “Memperkukuhkan Kearifan Tempatan ke Arah Pengantarabangsaan”* 6-7 Oktober 2013, Sutra Beach Resort, Terengganu

[10] Soleimanipour A, Chegini Sanguitnetti, A. 2014, Transformational practices in cohousing: Enhancing residents’ connection to community and nature, *Journal of Environmental Psychology*, Vol.40, pp. 86-96

[11] J William (2008) Predicting an American future for cohousing, *Future*, Vol. 40, pp.268–286

[12] Ache P., and WohnBund-Beratung M.F. 2012, The Development and Situation of Co-Housing Initiatives in Germany, *Built Environment Journal*, pp. 1-119

[13] Erickson M.A., Krout J., Ewen H., and Robison J,. 2006, Should I Stay or Should I Go? Moving Plans of Older Adults, Journal of Housing for the Elderly, Vol. 20(3), pp. 5-22

[14] Mydin, M.M. and Ahmad, N.S. (2014). The System of Islamic Studies at Madrasah(Sekolah Pondok). *Journal of Mechanical Manufacturing (J-Mfac)*, Vol.1

[15] Sharifah Meriam, Salhah and Sapora (2014). Challenges In Managing Elderly Care Centres In Malaysia, *International Journal of Arts & Sciences*, pp. 129–139

[16] Seeley IH. Building Maintenance. The Maximillan Press Ltd: 1987

[17] Siti Kalkhalah Shahrom and Rosilawati Zainol (2015). Universal design in housing for people with disabilities: A review, *Journal of Design and Built Environment* Vol. 1

[18] Jolanki O. & Vilkko A. (2015) The Meaning of a “Sense of Community” in a Finnish Senior Co-Housing Community, *Journal of Housing for the Elderly*, Vol. 29, pp.111–125