

Social Entrepreneurship Education for Aging Society Preparedness: A Malaysian Case Study of SEEDS@WAKAF

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ABSTRACT

Department of Statistic Malaysia reported Malaysian in transition to an aged-nation status by 2030, social impact including increase demand in healthcare service and equipment are projected. The SEEDS@WAKAF social entrepreneurship incubator by Politeknik Sultan Salahuddin Abdul Aziz Shah sustainable healthcare equipment solutions. Exemplifies a transformative model addressing these challenges through the integration of Islamic finance instruments like waqf. This initiative empowers Technical and Vocational Education and Training (TVET) students by engaging them in refurbishing and redistributing medical equipment to underserved elderly and low-income communities. The program operates through a collaborative network involving government agencies such as Perbadanan Wakaf Selangor (PWS) and Menteri Besar Selangor Incorporation (MBI), NGOs, and corporate partners, ensuring both operational and financial sustainability. It aligns closely with the Malaysia Education Blueprint 2015–2025 (Higher Education), emphasizing the development of holistic, entrepreneurial, and socially responsible graduates. Through hands-on activities such as medical equipment repair, marketing, and community outreach, students acquire technical skills, interpersonal competencies, and entrepreneurial experience. SEEDS@WAKAF also contributes to Malaysia's Twelfth Plan and Sustainable Development Goal 3 (Good Health and Well-being) by bridging healthcare gaps for marginalized populations. By integrating education, Islamic finance, and community service, this initiative offers a scalable model that addresses social and healthcare challenges in an aging society while fostering student transformation.

Keywords—Social Entrepreneurship, Waqf, TVET, Aging Society, Medical Equipment

INTRODUCTION

As Malaysia advances toward becoming an aging society by 2030, with projections indicating that over 15% of its population will be aged 60 and above. This demographic shift is already starting to strain the country's healthcare system and economic stability. Fewer children being born and smaller family sizes also mean less traditional support for the elderly, creating a pressing need for innovative solutions. One promising path is social entrepreneurship approach that blends business principles with social impact. In this paper, we explore how the SEEDS@WAKAF project, initiated by Politeknik Sultan Salahuddin Abdul Aziz Shah, acts as a training ground for TVET students to engage directly with these challenges. By working on real-world problems like access to medical equipment for elderly communities, students not only gain valuable skills but also develop a strong sense of responsibility. This case study looks at how the program prepares students for Malaysia's aging future while also delivering much-needed help to vulnerable groups. the nation faces multifaceted challenges in healthcare, social welfare, and economic stability.

The demographic shift, characterized by an increasing elderly population alongside declining fertility rates and smaller family sizes, necessitates innovative approaches to ensure the well-being of older adults while mitigating

the escalating costs associated with their care. Social entrepreneurship, which integrates business strategies with social objectives, emerges as a promising solution to address these issues through sustainable and community-centered initiatives. This study examines the SEEDS@WAKAF project, a social entrepreneurship initiative implemented by Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA), as a case study to explore how Technical and Vocational Education and Training (TVET) institutions can contribute to equipping students for the challenges posed by an aging society. The growing needs of Malaysia's elderly population present significant economic and social concerns, particularly in terms of healthcare access and support services. Traditional educational systems often lack the practical orientation necessary to address these complex issues effectively.

Consequently, there is a need to integrate social entrepreneurship into TVET curricula to prepare students with the skills and mindset required for developing innovative solutions to aging-related challenges. The SEEDS@WAKAF initiative serves as a social entrepreneurship incubator designed to empower TVET students by fostering technical proficiency, interpersonal skills, and entrepreneurial acumen. Through hands-on engagement in refurbishing and redistributing medical equipment to underserved elderly populations in Selangor and the Klang Valley, students gain practical experience while addressing critical healthcare gaps. This study evaluates the implementation and impact of the SEEDS@WAKAF project in cultivating socially responsible graduates capable of contributing to Malaysia's aging society through sustainable healthcare solutions.

LITERATURE REVIEW

Social Entrepreneurship in Malaysian Education

Social entrepreneurship plays a crucial role in addressing Malaysia's socio-economic challenges by fostering innovative solutions that merge social impact with sustainable business models. Integrating social entrepreneurship into educational frameworks is essential for cultivating a generation of socially conscious individuals equipped to address pressing societal issues. Zamry and Sahid (2021) emphasize that social entrepreneurship education in Malaysian public universities enhances students' preparedness to engage in social ventures, promoting a mindset oriented toward societal betterment.

The integration of social entrepreneurship within Malaysia's higher education landscape has gained considerable momentum in recent years, driven by policy initiatives, institutional reforms, and increased demand for community-oriented innovation. Government-led frameworks, such as the Malaysian Social Entrepreneurship Blueprint 2021–2025, emphasize the strategic importance of embedding social innovation into education through structured capacity-building, interdisciplinary curricula, and public-private partnerships. In line with these national strategies, Malaysian universities have responded by institutionalizing support systems for student-led social enterprises. These include innovation hubs and university-based incubators that offer mentorship, seed funding, and collaborative spaces to nurture entrepreneurial initiatives with social objectives. Liow and Wong (2021) demonstrate the effectiveness of such incubators in research-intensive universities, noting their capacity to mobilize institutional resources and provide strategic guidance throughout the entrepreneurial process.

Recent studies have reinforced the significance of integrating social entrepreneurship into educational institutions as a means to foster socially responsible and market-relevant graduates. According to Setyawati et al. (2022), the inclusion of social entrepreneurship education within vocational and technical institutions enhances students' ability to address local challenges innovatively, while also contributing to national socio-economic goals. Overall, the literature suggests that social entrepreneurship in Malaysian higher education is evolving from a peripheral initiative into a core component of institutional identity and national development. This transformation reflects a broader global trend in which education, innovation, and social impact are increasingly interconnected in addressing complex societal challenges.

Element Waqf in Healthcare

Waqf, a form of Islamic charitable endowment, has long played a role in supporting public welfare, especially in healthcare. Historically, waqf funds were used to build hospitals such as JCorp, Klinik Wakaf An Nur provides free medical services to the poor. These institutions operated independently under Johor state government offering consistent aid over generations (Mohamad & Ismail, 2022). In modern Malaysia, the waqf concept is

being adapted through innovations like cash waqf and corporate waqf. These models are being used to support healthcare programs in underserved areas. For example, private companies are now contributing part of their profits to waqf funds, which are then used to buy medical equipment or finance clinics (Hasan & Ariffin, 2021). Still, there are challenges. Mismanagement, lack of transparency, and weak legal frameworks often limit waqf's potential (Abd Jalil, 2023).

The Aging Society in Malaysia

Malaysia is on track to becoming an aged nation, with forecasts suggesting over 17% of the population will be over 60 by 2040 (DOSM, 2024). This shift is already creating pressure on the healthcare system, especially with the rise of chronic diseases like diabetes and dementia among the elderly. Economically, fewer working-age citizens mean a shrinking labor force and a heavier burden on social services. Socially, traditional family-based care models are weakening due to urban migration. This has led to increased isolation among the elderly and growing demand for institutional care (Ismail et al., 2021).

Global Models of Waqf-Based Medical Social Entrepreneurship in Aging Societies

Waqf-based models have been widely engaged to support healthcare for the elderly and unfortunate. Successes waqf models in Indonesia such as hospital Roemani Muhammadiyah and Dompot Dhuafa operate with waqf funds to provide free or low-cost care in remote areas (Rahmanto et al., 2023; Effendi et al., 2022).

Meanwhile, the study reported by Ahmed & Iqbal, 2021 presented a project of the Al-Shifa Charitable Trust a hybrid Waqf-based for healthcare initiative that delivers mobile medical services and home-based eldercare in underserved rural areas in India. That model addresses the healthcare challenges of accessibility and affordability both of which are barriers to healthcare for aging populations in low-income regions. Waqf is an Islamic model solution of community engagement sharing that contributes to long-term community empowerment in healthcare equity.

METHODOLOGY

This research employs a case study and qualitative approach to analyse the SEEDS@WAKAF project at Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA). The methodology involves a review of project documentation, including business model canvases, financial reports, and promotional materials. Data on project activities, beneficiaries served, and funds generated were collected to assess the project's impact and sustainability. Additionally, interviews were conducted with project mentors, participating students, and community partners to gather qualitative insights into the challenges and successes of SEEDS@WAKAF.

RESULT AND DISCUSSION

The SEEDS@WAKAF project exemplifies the integration of social entrepreneurship and Islamic finance principles in addressing healthcare challenges faced by elderly and needy populations in Malaysia. This initiative presented as Figure 1.0 the operational framework established in provides a sustainable model that combines technical skills development, robust community engagement, and responsible financial practices. By leveraging Technical and Vocational Education and Training (TVET) within a Waqf-based framework, SEEDS@WAKAF effectively prepares polytechnic graduate for Malaysia's aging population anticipated by 2030, thus contributing to both individual welfare and broader societal readiness. The SEEDS@WAKAF case study highlights key findings related to social entrepreneurship, Waqf principles, and accessible healthcare provision in Malaysia.

Business Model Framework

The operations and fundraising model are a combination of collaborations support from governmental entities, NGO and private companies. This is in support of their moral goals of supporting and lessening the burden of families that need assistance. The collaboration networks and framework shown in Figure 1.0 highlights the critical role of these partnerships.

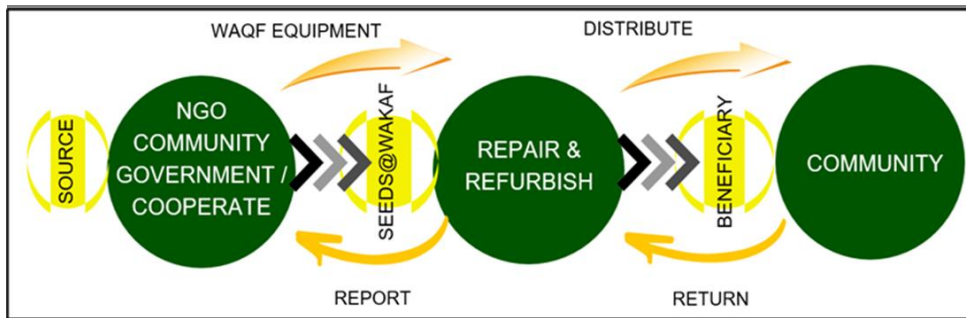


Fig. 1 SEEDS@WAKAF Framework

Enhanced Healthcare Access through Affordable Equipment:

SEEDS@WAKAF enhances healthcare access for low-income families and elderly individuals by providing both new and refurbished hospital beds and wheelchairs at significantly reduced costs approximately 60% compared to purchasing new equipment. This affordability extends to transportation, with delivery and return costs included, and no charges for equipment malfunctions during use. This initiative directly supports Sustainable Development Goal 3 by promoting equitable access to healthcare for underserved populations.

Economic Sustainability through Waqf and Donations

The project has generated substantial funds from donations and activities, ensuring its financial sustainability. This model demonstrates the potential of Waqf as a sustainable funding mechanism for social ventures. Healthcare facilities frequently encounter challenges related to the degradation of existing medical equipment due to wear and tear. A significant contributor to premature disposal is the lack of accessible, specialized technical expertise for repairs, a gap highlighted in several studies. A study by Tiemann et al. (2021) emphasized that the scarcity of skilled maintenance personnel in both public and private hospitals exacerbate the issue of medical device underutilization and replacement. This shortage not only accelerates the retirement of otherwise functional devices but also elevates operational costs. Additionally, the death of a family member often leaves surviving relatives with the responsibility of managing medical equipment as part of estate affairs, a process that is frequently complicated by emotional stress and a lack of institutional support for proper handling and redistribution of such equipment. In response to these challenges, this programs now allow family members to donate used medical equipment, thereby reducing waste and easing the logistical burden on families while supporting broader healthcare needs through effective Waqf mechanisms. This program has also set goals to reach Sustainable Development targets to reduce equipment waste by promoting the repair, reuse, and innovation of products and services. Through this effort, they work to bring about well-being for both the community and for the individual. These findings align with research by Daud et al. (2024).

Student Development and Skills Enhancement

SEEDS@WAKAF significantly enhances students' technical, interpersonal, and entrepreneurial skills through practical application, aligning with the emphasis on producing holistic, industry-ready graduates with social awareness. Technical skills are developed through hands-on maintenance, machining, welding, electrical circuit, and wiring tasks, preparing students for technical roles in healthcare equipment servicing. Echoing the Malaysia Education Blueprint 2015 - 2025's focus on applied learning, students refine marketing skills through website development (www.seedspsa.my), social media management (TikTok, Instagram, Facebook under the name seedspsa), and conventional marketing methods, including exhibitions and print media, ensuring digital literacy and marketing proficiency. Interpersonal skills and student confidence are built through customer relations, marketing and business presentations, and community engagement, aligning with the Plan's objectives of fostering leadership and societal contribution through holistic social entrepreneurship. Elements of the Malaysia Education Blueprint 2015 - 2025 (Higher Education) – (MEB HE) through the 10 Shifts evident in SEEDS@WAKAF:

Holistic Graduate Development:

Aligning with the Malaysia Education Blueprint 2015-2025 (Higher Education)'s focus on producing holistic

graduates with industry-relevant skills and a strong sense of social responsibility, this projects strategically integrates practical Technical and Vocational Education and Training (TVET) with the development of interpersonal and marketing competencies. This is achieved through direct student involvement in the repair and maintenance of medical equipment, as well as engagement in marketing and customer service roles. This dual approach not only provides students with hands-on technical expertise but also cultivates essential soft skills, thereby enhancing their readiness to contribute to Malaysia's socio-economic well-being.

Industry-Relevant Skills

SEEDS@WAKAF directly addresses the need for graduates who are job-ready and equipped with technical expertise relevant to industry demands. Through hands-on training in equipment repair, machining, and electrical work, students gain practical experience that prepares them for roles in healthcare technology servicing. This aligns with findings by Azman et al. (2020), who emphasized that industry-aligned training in TVET institutions enhances graduate employability by bridging the gap between curriculum content and real-world applications. Similarly, Wahab et al. (2021) highlight that embedding technical problem-solving into student projects strengthens their readiness for high-demand sectors like healthcare and engineering.

Social Responsibility

The Malaysia Education Blueprint underscores the development of socially responsible graduates capable of contributing meaningfully to society. SEEDS@WAKAF reinforces this principle by instilling empathy and civic consciousness through community-based healthcare support. Students witness first-hand the impact of their work on vulnerable groups, cultivating a deeper sense of responsibility. This experiential learning model is supported by Ismail and Hassan (2022), who found that student involvement in social entrepreneurship initiatives significantly improves their awareness of community needs and strengthens their commitment to societal well-being.

Entrepreneurial Mindset

Fostering innovation, creativity, and initiative is central to developing an entrepreneurial mindset—one of the key shifts outlined in the Malaysia Education Blueprint. SEEDS@WAKAF achieves this by involving students in business planning, marketing, and project management. These activities encourage self-directed learning and problem-solving in dynamic environments. Research by Norazmi et al. (2023) confirms that participation in social enterprise projects nurtures entrepreneurial skills among TVET students, promoting innovative thinking and initiative-taking. Their findings also emphasize that real-world entrepreneurial exposure enhances students' adaptability and resilience are key traits in today's evolving job market.

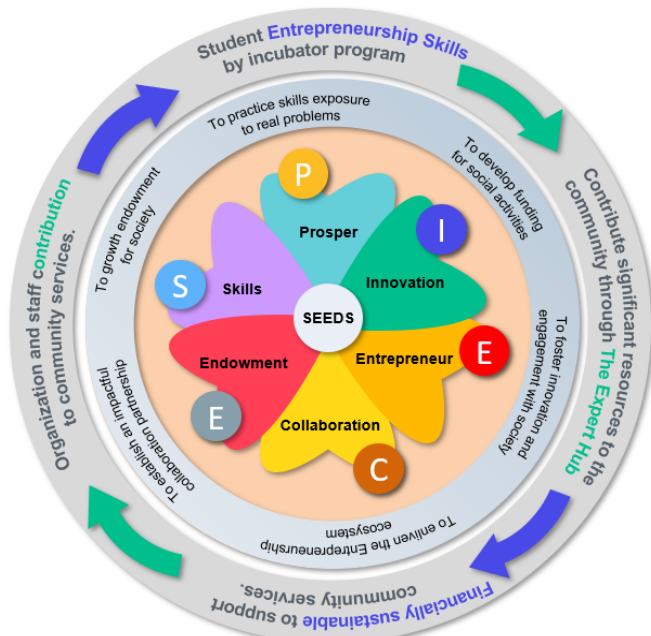


Fig. 2 SEEDS@WAKAF MODEL

Collaborative Framework for Sustainability

The success of the SEEDS@WAKAF initiative is largely attributed to its robust collaborative framework, which actively engages a diverse network of stakeholders, including government bodies, non-governmental organizations (NGOs), and private sector entities. Strategic partnerships with institutions such as Perbadanan Wakaf Selangor through '*Sumbangan Wakaf Fisabilillah*' (Figure 3.0) and the Selangor Menteri Besar (Incorporation) [MBI] through Cooperate Social Responsibility Program play a crucial role in facilitating resource mobilization, governance oversight, and alignment with state-level development agendas. These government agencies, alongside NGOs and corporate partners, contribute through financial support, marketing outreach, and technical expertise, enhancing the program's operational efficiency and long-term scalability. This model of collaborative engagement not only ensures sustainability but also strengthens the initiative's alignment with national development priorities and the Sustainable Development Goals (SDGs), particularly SDG 3: Good Health and Well-being. Innovative Waqf-based programs such as Malaysia's myWakaf initiative further exemplify sustainable Waqf governance. By integrating Islamic financial institutions with State Islamic Religious Councils (SIRCs), the myWakaf program advances financial innovation through mechanisms like the Cash Waqf Linked Sukuk (CWLS), thereby broadening the donor base and increasing the financial viability of Waqf projects (Mahmud & Noordin, 2024). Similarly, the Food Security Waqf Model (FSWM) underscores the potential of Waqf in addressing national priorities such as food security, offering a legally compliant and scalable model for sustainable resource management (Abd Jalil, 2023).



Fig. 3 Fisabilillah Waqf Contributions from The Selangor Waqf Corporations

Addressing the Aging Population and Increasing Chronic Illness:

Malaysia is experiencing a demographic shift toward an aging society, with projections indicating that more than 15% of the population will be aged 60 and above by 2030 (Nik Norliati Fitri Md Nor & Suriati Ghazali, 2021). This shift is closely linked to a rising prevalence of chronic illnesses, which has resulted in a growing number of bedridden patients requiring long-term care and medical support. A national health survey by the Ministry of Health revealed that non-communicable diseases (NCDs) such as diabetes, cardiovascular disease, and stroke are major contributors to long-term disability and immobility among elderly Malaysians (Institute for Public Health, 2020). In response, SEEDS@WAKAF provides a timely and innovative intervention by offering essential medical equipment and support services to elderly individuals, particularly those who are chronically ill and confined to bed. Within just two years of operation, SEEDS@WAKAF has supported over 70 beneficiaries, the majority of whom are elderly patients living with chronic conditions. Equipment such as hospital beds has been effectively utilized and, in many cases, returned and recycled for use by other patients, demonstrating the program's sustainable and community-entered approach. The program's model aligns with

the findings of Kadir et al. (2022), who emphasize that innovative and localized eldercare initiatives are critical in addressing the needs of Malaysia's aging and medically vulnerable population.

Insights from Stakeholders

Qualitative data gathered through stakeholder interviews offer valuable perspectives on the multifaceted impact of the SEEDS@WAKAF initiative, particularly in enhancing social entrepreneurship within Technical and Vocational Education and Training (TVET), student development, and community well-being.

An academic from Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA) emphasized the pedagogical value of the program, stating that “the integration of social entrepreneurship into TVET programs provides students with a holistic skill set that prepares them for real-world challenges, fostering both innovation and social responsibility.” This observation reinforces the argument that embedding entrepreneurial elements within higher education curricula contributes not only to student capacity-building but also to broader community development outcomes (Saiz-Álvarez, 2019). Recent research supports this integration, noting that social entrepreneurship education in vocational settings enhances students' ability to develop empathetic solutions that address real societal problems (Setyawati et al., 2022).

The student experience further validates this perspective. One of them shared that “being part of SEEDS@WAKAF has enabled me to apply my technical knowledge to help people in need. It's fulfilling to see our work directly improve someone's quality of life.” This testimonial reflects the value of experiential learning in cultivating civic engagement and ethical awareness among students which are key dimensions of holistic education (Kolb & Kolb, 2021).

From the beneficiary perspective, the tangible impact on underserved communities is evident. A recipient of the program's services remarked in our interview claimed “The affordable equipment we obtained from SEEDS@WAKAF significantly reduced our financial burden, allowing us to provide better care for our family member.” This response highlights the program's role in enhancing healthcare accessibility and easing the financial burdens commonly experienced by vulnerable groups an objective aligned with the United Nations' Sustainable Development Goals (UNDP, 2021). These personal stories reflect the real-life benefits of the initiative and confirm its value not only in education but also in healthcare access and community support.

CONCLUSION

The SEEDS@WAKAF project is a strong model for combining education, Islamic financial principles, and community service to address urgent healthcare challenges. By involving students in the refurbishing and distribution of medical equipment, the program enhances both student learning and community well-being. The use of waqf and donations ensures that the initiative remains financially viable while supporting low-income families and elderly individuals.

SEEDS@WAKAF also aligns well with national goals, particularly in producing industry-ready, socially responsible graduates. It demonstrates how TVET institutions can play a central role in building sustainable solutions for aging populations. This case study offers a practical and replicable framework for other institutions and policymakers looking to integrate social entrepreneurship with community healthcare.

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