

50 Years and beyond on Knowledge for Change in Malaysia: The Case of Universiti Sains Malaysia (USM)

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Abstract

Universiti Sains Malaysia (USM), through five decades of academic standing since 1969, has embodied knowledge democracy into its university-community engagement. Here, we feature USM's relevant foundations, notable accomplishments and aspired trajectory in upholding social responsibility and sustainable development as tools for meaningful change, with and for, the society.

Keywords

Malaysia – knowledge for change – sustainable development

1 Introduction

In its quest to address the widening economic disparity, with the aim of producing a progressive nation, in 1969, Malaysia established its second public university in the northern peninsular state called Universiti Sains Malaysia (USM). Since its inception, USM has been mandated to narrow the social and economic imbalances in helping the government to improve the living standards of citizens (Ab Razak, 2009). Underpinned by its vision “We Lead”, USM endeavours to be socially responsible in all its undertakings, inclusive of reaching out to the masses with its University-Community Engagement (UCE) initiatives. USM has been governed by five Vice-Chancellors (VCS) in the last five decades. In the first two-decades, though USM addressed societal concerns by solving illiteracy issues and raising education standards, in line with the government's education policies, it never truly engaged in UCE programmes. It was in its third decade, accompanied by the global idea of advocating

knowledge democracy, that USM began to proactively participate in UCE initiatives. This participation took a firmer footing through the establishment of a dedicated department, known as the Division of Industry and Community Network (BJIM), under the purview of the Deputy Vice Chancellor (Kechik & Arshad, 2019).

In parallel with BJIM, the 'Kampus Sejahtera' (balanced campus) concept was conceived in the fourth decade, with the ultimate purpose of accelerating awareness on the importance of UCE initiatives. 'Sejahtera' is a Malay phrase that carries multiple meanings – peace, tranquility, harmony, wellness and health – viewed collectively by USM as a balanced living in all aspects, from spiritual to physical, intellectual, cultural, ethics, economics, as well as environmental, so as to produce and sustain a balanced society. The Kampus Sejahtera concept promotes the dissemination of knowledge and practices in the university and wider communities through various platforms of teaching, research, and student-led activities for a sustainable, holistic living. Based on these initiatives, in partnership with various stakeholders from the community and government agencies, USM was recognised as a Regional Centre of Expertise on Education for Sustainable Development (RCE) (known as RCE Penang) by United Nation University, Institute for the Advance Study of Sustainability (UNU-IAS) in 2005. This acknowledgement contributed significantly towards the of Accelerated Programme for Excellence (APEX) status by the then Ministry of Higher Education, positioning USM as the premier public University in Malaysia with an APEX theme, "Transforming Higher Education for a Sustainable Tomorrow" (Ab Razak, 2009). Aligned to its main mission as a pioneering, transdisciplinary and research-intensive university that empowers future talents and enables the bottom billions to transform their socioeconomic well-being, the emphasis is on the seven thrusts, namely: future, uniqueness, sustainability, humanity, change and sacrifice.

As USM moved forward into the fifth decade, it strengthened its global UCE-agenda prominence in the region, namely through the Asia-Pacific University-Community Engagement Network (APUCEN), and the UNESCO's Knowledge for Change (K4C) movement. Now at 50 years, USM is set to accelerate its momentum in three core domains – research, outreach, and leadership – to anchor social responsibility. In 2019, in its first appearance in the University Impact Ranking (Times Higher Education) involving more than 450 universities from 76 countries, USM ranked 1st in Malaysia and 49th in the world (QS, 2019). USM's social responsibility initiatives were recognised, as it fulfills many of the UN Sustainable Development Goals (SDGs), including SDG 3 – good health and well-being for people; SDG 4 – quality education; SDG 11 – sustainable cities and communities; and SDG 17 – partnerships for the goals.

Ultimately, this recognition reflects USM's guiding frameworks as the foundation and practical vision in championing social responsibility and sustainable development as a commitment to SDGs, at both local and global levels. These contributions, in some way, align with the USM Kampus Sejahtera concept for a balanced, sustainable society.

2 The Foundation

USM, as a public Higher Education Institutions (HEIs), is influenced by numerous government policies related to education and economic developments of Malaysia (Chang et al., 2019; Clavirate Derwent, 2018; UKessays, 2016). Since the implementation of the first education policy from the pre-independence era Razak Report (1956), Malaysia has benefited significantly from continuous policy reforms, starting from Rahman Talib's Report (1960), Mahathir's Report (1979), the 46th UNESCO International Conference on Education (ICE) Country Report (1996), and the National Education Blueprint 2015–2025 (Al-Hudawi et al., 2014; Ministry of Education Malaysia, 2013; UNESCO, 2001). Alongside these, USM adapted its core social responsibility by producing talented graduates to meet the labour market needs. USM managed to invigorate its UCE initiatives and has taken the lead in promoting UCE initiatives both locally and internationally through BJIM and its APEX agenda. In response to the rapidly changing and incomprehensible future, USM realigned and leveraged its resources and talents to address the citizens' multifaceted issues (e.g. economic, social and cultural), in accordance with its social responsibility.

The apparent lack of guidelines or specific recommendations for HEI's on UCE frameworks at the national level has prompted USM to initiate, develop and pioneer Malaysia's institutional UCE framework. Led by BJIM, USM actively participated in UCE initiatives, and has gradually motivated other public HEI's in Malaysia to embark on UCE programmes. Since its formation about a decade ago, BJIM has gone through various phases of development. Most of the UCE programmes that were led by USM were carried out to cater to the Malaysian government's transformation agenda (National Economic Plan – NEP). To enhance the delivery of UCE programmes, BJIM has also produced a toolkit (UCE Leadership Toolkit), to aid potential applicants to construct their UCE proposals more pragmatically, in accordance with the government's stipulated transformation agenda (Kechik & Arshad, 2019). In supporting the government's transformation agenda, BJIM also received special funding from the Ministry of Education (MoE). Due to BJIM's past performances, the MoE has entrusted BJIM to conduct training programmes to familiarise HEI's on the

fundamentals of UCE programmes. The MoE strongly encourages local public and private universities to engage in Knowledge Transfer Programmes (KTP). In fact, the MoE has set up its secretariat at USM, and appointed USM to be the leader for its KTP initiatives.

BJIM's continuous pursuits in improving public lives has ultimately given birth to several worthy UCE programmes. Some of the impactful UCE programmes led by USM have been used as a benchmark to inform potential UCE proposals (Kechik & Arshad, 2019). To bolster BJIM's UCE aspirations across national borders, it has created another wing under its ambit, APUCEN. Motivated by the belief that HEIs can cooperate with the community to translate research findings to enhance the social, economic, health, education, culture/heritage and environment of the community in the Asia-Pacific region, APUCEN was initiated in 2010 by USM, to support the APEX agenda. APUCEN was officially launched in 2011, with 43 founding members from 10 countries. Today, APUCEN has 100 members from 20 countries, expanding beyond the Asia-Pacific region. In addition, APUCEN also encourages the corporate sector, as well as non-governmental organisations (NGOs), to be members, aiming to work together to conduct Corporate Social Responsibility (CSR). APUCEN passionately believes in mutually beneficial relationships and partnerships with communities to address communities' issues and needs; a commitment that is guided by mutual respect among the partners and member institutions and countries; and learning to co-create knowledge with partners.

APUCEN has been entrusted to play a bigger role in promoting UCE initiatives beyond boundaries. In view of its wider networking advantage with foreign universities, APUCEN has received international recognition for its UCE initiatives. APUCEN has played a key role, both domestically and internationally, with its collaborative partners in addressing community plights. APUCEN's UCE programmes have been executed based on the UN SDGs. APUCEN was able to manoeuvre smoothly with its UCE agenda, since it has vast experiences in championing UCE programmes. Recently, APUCEN managed to attain another recognition when the UNESCO Chair in Community Based Research and Social Responsibility invited APUCEN (USM) to be part of the "Knowledge for Change" (K4C) movement, to support the social responsibility agenda internationally.

APUCEN is committed to creating a global university, which is not about one university, but about the combined strength of all APUCEN members to successfully conduct global engagements to address global issues. The partnership between members from different continents can collectively produce ideas to overcome global community issues in a more innovative manner. APUCEN believes strongly in celebrating differences towards the same goal.

3 We Lead

Most of USM's Kampus Sejahtera UCE initiatives and programmes were conducted in congruence with the national policies, Millennium Development Goals, and the current SDGs. Among many other successful UCE projects to date, we illustrate here some of the meritorious UCE programmes and projects, initiated by USM with different communities.

3.1 "White Coffin" Project

White Coffin is a student led Kampus Sejahtera project, which was initiated to ban the use of white polystyrene containers. The project was launched in 2007, when a group of students campaigned to abolish the use of polystyrene containers on campus. The *White Coffin* (Figure 19.1) conveys a strong image regarding the detrimental effects of polystyrene use on human and environmental health. The initiative has garnered the campus community's support, including the university's top management, to provide guidelines for café operators on campus. In support of the White Coffin, solutions for alternate containers, such biodegradable materials and food containers, were finally implemented on campus. The project received unexpected public endorsement and caught the attention of local media, and has convinced other campuses and local communities to follow USM's steps towards a polystyrene-free environment. The project also received international recognition from the Global University Network on Innovation (GUNi) and the Healthy Cities Alliance Conference (Ab Razak, 2009). The project highlighted how a bottom-up approach from the community, with strong support from top management, can lead to swift implementation of UCE projects.



FIGURE 19.1
The White Coffin poster

White Coffin has empowered student activism and demonstrated the stewardship capacities on campus. Group dynamics and interventions pushed knowledge/belief to a higher level of practice and change at the campus level, an achievement that was recognised by other campuses and organisations. However, as the project was introduced and adapted by other campuses and cities globally (Ab Razak, 2009), USM faced challenges to sustain its momentum. With new students coming in and old students leaving, this initiative has not been passed onto the incoming cohort, unfortunately. This challenge needs to be revisited to ensure that the project is sustained and spearheaded by students on campus.

3.2 *“Sustainable Lifestyle” Project*

After obtaining the APEX status, USM begin to actively engage in global and sustainability agendas (Ooi, 2012; USM, 2008). Sustainable practices, such as recycling and food waste composting, at schools and residences are promoted as a local agenda. Unfortunately, such practices are not common, or are often absent among urban communities. Thus, the then newly established Centre for Global Sustainability Studies (CGSS) embarked on a community-based participatory research project entitled “Enhancing Sustainable Living within USM and its Neighboring Community”, launched in 2011 with the aim of promoting and diffusing USM’s sustainable lifestyles to surrounding neighborhoods. The research was undertaken within an 8 kilometer radius from USM, with 6 schools and 4 resident associations as the main partners (Norizan et al., 2011). Some of the sustainable activities conducted included recycling campaigns, collection and selling of recycling materials and composting and training of trainers. The Organization for Economic Cooperation and Development (OECD, 2007) suggests that HEIs can contribute to sustainable development by playing a brokerage role in bringing together diverse regional actors and elements of capacity to the sustainability process, and campuses can demonstrate good practices. In this project, CGSS was the broker between academics, practitioners and partners. In addition, USM, as a campus, provided examples of good practices, running initiatives such as: University in a Garden, waste composting and Say No to Plastic.

The relational characteristics of the project are evident from the dialogue and mutual learning that took place between all the players. Knowledge and experiences (best practices, problems and solutions) from USM researchers, practitioners, agencies and residents’ associations in Penang that have successfully implemented practices in sustainable waste management, were shared with the partners via hands-on trainings, site visits, focus group discussions and documentations (Norizan et al., 2011). In terms of the structural dynamics

of the project, the partnerships between the CGSS research team and partners developed from project inception until completion, but the involvement of practitioners was mostly on a one-off basis. Working with a community requires flexibility, and activities were adapted based on collective reflection and feedback from the various partners. A major challenge of the project were institutional barriers, such as transfer of facilities provided or developed by the project (recycling bins and composting unit) to the partners. Reflecting on this project from a social-ecological context, translating the global agenda of sustainable development at the local scale (lifestyle) requires the involvement of all stakeholders. Other than the modules, videos and reports published by the researchers, documentation and analysis of the research process could provide insights into the characteristics of successful UCES, in efforts to enhance sustainable lifestyle research agenda.

3.3 “Oyster Culture” Project

The population in Malaysia has increased tremendously over the past 20 years, and the demand for food is rising every year. This, along with the pressures of climate change, has led to the gradual depletion of fish in the ocean. Fishing communities are facing problems getting a large enough fish supply to sustain their livelihoods. Malaysia is now moving towards aquaculture for food security, rather than capture fisheries. However, aquaculture is not applicable to all because of the high cost involved, which most local communities are unable to sustain. Oyster farming is a newly emerging seafood industry in Malaysia. It has enormous potential for growth, both in local and international markets. The current oyster trade in Malaysia was valued at RM 24 million (Malaysia’s Trade Statistics) in 2015. This represents only 14% of the demand (Figure 19.2). The supply is restricted by the limited oyster seed supply and long culture cycles. Currently, oyster farming relies on hatchery-produced seeds instead of natural seeds, which are inconsistent in amount and are seasonal. USM researchers saw a knowledge gap and an opportunity in the oyster industry in Malaysia, and has embarked on this project with the local fishing communities.

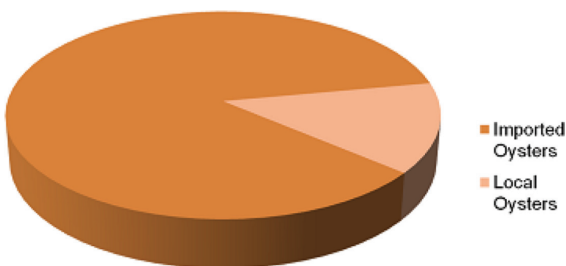


FIGURE 19.2
Oyster trade in Malaysia
in 2015

Under the auspices of the Bay of Bengal Program (1988–1993), the Department of Fisheries undertook the introduction of oyster farming in Kedah, Perak, Langkawi, Johore, Kelantan and Terengganu. Not much attention was given to Sabah and Sarawak during that time. The expansion of the oyster farming industry in Malaysia could be faster, if not for the limited seed supply. Only hatchery production can provide the required supply of seeds, both in terms of quantity and quality, for the expansion of the farming industry. USM engagement is a timely one, because for many years, USM researchers had conducted research on Malaysian oysters. USM extended its knowledge on growing oysters to benefit the livelihood of local communities. Aiming to reduce reliance on imported oysters, local communities were empowered to champion oyster farming in Malaysia. The benefits of oyster farming to the rural communities have been undeniable, as it is a product which is low-risk, halal, low maintenance, and, most importantly, it is a green aquaculture where no additional food or antibiotics are required, unlike in fish or prawn aquaculture (CEMACS, 2020). Oyster farming has become the main research area at the Centre for Marine and Coastal Studies (CEMACS) at USM. Indeed, a commercial-scale sustainable oyster farming system offers economic returns for the local communities, by capturing the domestic and foreign markets, with the training and guidance on the basic method of culturing oysters, inclusive of setting-up their own floating cages. The local communities can produce a continuous supply of oysters and has paved the way to improve the living standards of local communities. It is also important to note that the project has high economic impacts on the community, while being a social responsibility initiative, where USM aims to transfer knowledge to traditional fishermen and village communities. The continuous commitment and support of the researchers are integral for the success of a UCE project.

Oyster farming has proven to be a successful project with the community, and a similar approach can be used to create an industry for Malaysia through partnerships between university, government, industry and community.

4 Conclusion

Malaysia's aspiration to become a developed nation with 'Vision 2020' has now become the 'Shared Prosperity 2030' vision. This vision was recently introduced, and education remains one of its pivotal enablers. In this context, HEI's in Malaysia have to continue to play a more proactive role in promoting social reforms, in line with the SDGs. In the past five decades, USM had embarked

and continues to strive to meet its core responsibilities by upholding its social responsibility reform agenda, as a leading public HEI's in Malaysia.

Beyond higher education, USM recognises its institutional prowess as a catalyst to instigate positive change to a wider reach, in the form of social and economic progress, in accordance with the SDGs. USM's APEX seven thrusts envisions that a society-centric agenda, which targets the bottom billions, is being translated with social responsibility actions, and UCE projects must yield meaningful impacts to society. Scholarly essence is also heightened through shared responsibility and mutual respect with members of the community and industry partners, while exhibiting responsible, accountable and ethical conduct as key enablers for achieving its UCE mission (Crosling, 2017; Hall et al., 2015).

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