TAKING SUSTAINABILITY TO THE COMMUNITIES: A CASE STUDY IN TAMAN MEDAN CAHAYA PHASE II, PETALING JAYA, MALAYSIA

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ABSTRACT

University low-income urban community engagement takes many forms. Taman Medan Cahaya Phase II is a low-income urban area not far from the University of Malaya. This part of the Petaling Jaya suburbs (in the state of Selangor) is a microcosm of urban poverty issues and has a history of racial conflict, high teen pregnancies, unemployed youth and other issues. In order to provide the community of Taman Medan Cahaya Phase II with some exercise, an alternative source of income and sustainable food sources, UM's Community & Industry Liaison Centre of Universiti Malaya (CItRa) collaborated with UMCROPS (UMCares' urban farming initiative) to establish a neighbourhood farm on unused land in their carpark in 2013. This effort was later supplemented by a rain-water harvesting cum aquaculture project. This project not only provided the community with a visible project around which they could gather and work together on, but it also extended UM's campus sustainability efforts to its neighbouring communities. This model of engagement made the most of internal (UM) networks and partnerships to ensure a broad-based offering to the community and made the most of available expertise on campus. The collaboration showed that organic farming can become a tool with which to engage communities, nurture relationships and kick-start bigger, more holistic programmes from which the community can benefit. This paper will detail the development of this effort and how it paved the way for more extensive programmes with the community.

Keywords: community engagement, organic farming, rain-water harvesting, low-income urban, sustainable food sources

1. INTRODUCTION

Taman Medan Cahaya Phase II is a low-income suburb in Petaling Jaya not far away from the University of Malaya. While its residents do not stay in PPR (government-issued low-cost housing) the apartments in this area remain within the lower-cost range of accommodation, with houses on the market for about RM45,000 for a unit of about 650 sq feet. The community represents a good spectrum of Malaysian people and many in this community own their low-cost homes, while others rent. However, even though they are owners of these properties, many struggle to pay maintenance and meet the daily costs of living and other demands. These

communities do not benefit from the assistance that PPR and other government-supported areas get.

The former University of Malaya Community Engagement Centre (*Pusat Jaringan Masyarakat – PJM*) first began working with the community of Taman Medan Cahaya Phase II in 2012. Work began with efforts to establish an organic farm and composting initiatives, as well as the development of an online data management system to help the local residents' committee manage and monitor payments and other administrative matters for Blocks G & H. While the data management system took more than a year to develop and the local committee was constantly in touch with the postgraduate student from the Faculty of Computer Science & Information Technology (FSKTM) that was developing the system, organic farming efforts were sporadic and inconsistent.

In a series of restructuring exercises, PJM combined with the then-UM Community & Industry Relations Centre (CItRa). At this stage (2013), efforts to engage with the Taman Medan Cahaya community were revived, and a more concerted effort was put into place for regular engagement and a series of activities with the local women and children. These activities were carried out either in collaboration with other units in the University of Malaya or external service providers who could meet the needs at hand.

One of the keys to successful community engagement is to provide services to a community based on what they indicate are their needs and wants. It is also much easier to engage with a community if there is a way into their fold through a contact that is trusted by both the community and the contributor. In the case of Taman Medan Cahaya, UM was able to depend on the writer (Ahmad Shaharudin b Mohamad Mokhtar) as he was both a resident of the area and a staff of PJM. As the project evolved, the writer was able to lead efforts on both the university's an community's points of view as he was able to consolidate the needs of interests of both for the benefit of all.

2. LITERATURE REVIEW

According to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the Asian Development Bank (ADB) and the United Nations Environmental Programme (UNEP), food security is a particular concern in Asia and the Pacific as the more than 545 million people in the region still consume less than the global standard of 2,200 calories per day (UN/ADB, 2012). While in rural areas some communities are still able to eke out a relatively consistent source of nutrition through small crops planted for household consumption, or harvesting from wild growths, those who live in urban areas do not have the luxury of wild flora and vast spaces from which to source 'free' food.

Safe and nutritious food is another requirement of food security and in some countries, food stocks are constantly tainted with excess pesticides and chemical-laden fertilisers that stubbornly remain on fruits and vegetables. Rising global costs will further aggravate these health risks as poorly produced high-risk foods will enjoy lower prices. Lower incomes worsen the situation and drive the poor to consuming these low quality and vastly cheaper sources of

nutrition. Truly sustainable development requires economic progress that is defined by environmentally sustainable, low-carbon emitting and socially inclusive initiatives. Good community health and wellness are also part of the requirements for a truly sustainable and inclusive society.

Water security is yet another big problem on the horizon. Water is possibly the most important resource in the world; reliable quantities of good clean water are often listed as a prerequisite for economic development and well-being. In low income areas, grassroots innovations need to be nurtured and facilitated so that traditional knowledge can solve modern day issues. Agriculture is the world's biggest user of water (UN/ADB, 2012), and demand for water in the region is expected to soar.

Residents of low-income urban areas need to be capacity-built to cope with these issues. Universities can play the role of an 'enabler' – one who does whatever is required to bring people together for collective learning and self-directed action (Robinson & Glanznig, 2003). By working together in a communion for change, empowerment is possible and ecological balance can be returned – or in the case of urban organic farming, ecology can be drawn to an area and/or reinvigorated; with multiple benefits for both habitats and people in need.

The United Nations Brisbane Declaration on Community Engagement (2005) states that communities must be 'adequately resourced to participate meaningfully' in engagement so that they 'have a stake in the outcome and benefit equitably as a result of being involved'. According to Arnstein's Ladder of Citizen Participation (1969), degrees of citizen power can only begin when communities are involved as partners in community engagement. This then allows them to contribute as equals to programmes that they are meant to benefit from. In UM's work with Taman Medan Cahaya, the presence of the writer allowed the community to have a voice in the decision-making on the depth and breadth of the programmes designed for them. Not only was he part of the local residents' committee, but he was also a staff member of CItRa, who was implementing the programme on the ground at the time.

With his input and continuous consultation and feedback from the community-at-large, plans evolved as time passed and activities were developed based on requests and ideas put forward by the residents involved.

3. METHODOLOGY

When UM first got involved in Taman Medan Cahaya, there were already some attempts at farming (mainly by the local Indian community). A consultant farmer and an eco-enzyme expert were brought in to demonstrate how the residents could tend to an unused plot of land behind their carpark, but the effort was a one-off and the land was hard and full of rocks. Some (Malay) families persevered and charted out small areas that they tended to themselves, but it was not a consistent effort and there was little collaboration between families of different ethnicities.

When PJM became a part of CItRa, and additional funds were made available to the Taman Medan Cahaya project, more effort was put into a more cohesive offering to the community.

The diagram on the following page illustrates the phases of the engagement effort and the variety of activities that were provided to the community based on their feedback. Most of the programmes were offered in collaboration with other parties in the university or with external service providers who had the expertise to meet the interests of the community.

The difference between the programmes that were conducted in 2013 onwards was that they were on-going and regular. While this was also due to the availability of funds, this helped to reassure the community that the university was committed to contributing to their well-being and were making an effort to meet their requests. A change of residents' committee at the local level also played a part in this as the new head of the committee was a younger, more visionary leader who could understand the potential benefits of the programmes offered if the community was to get involved.

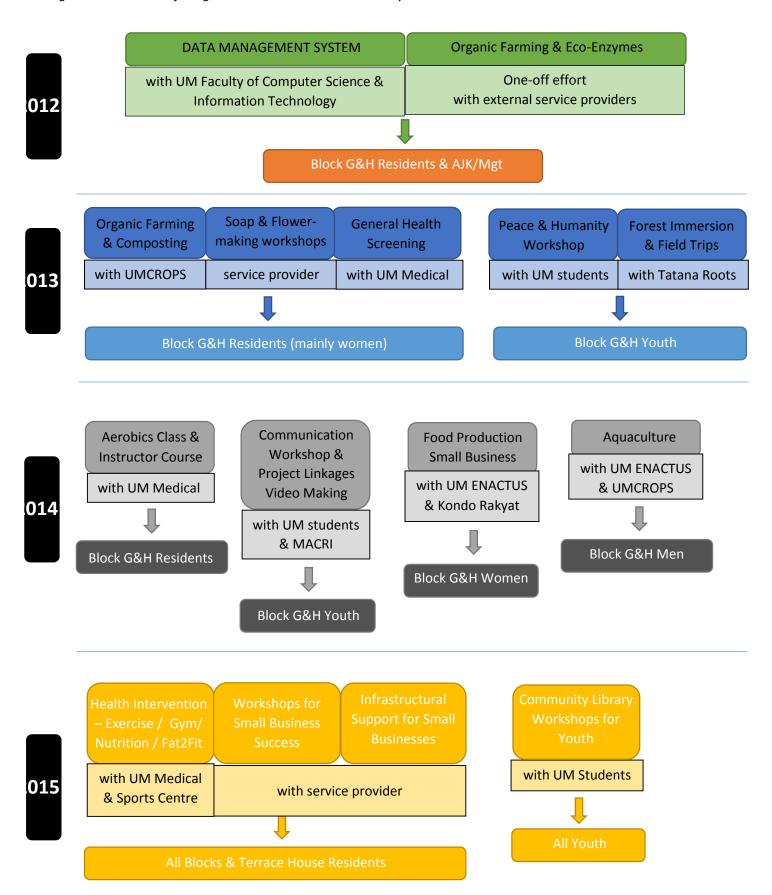
4. FINDINGS AND DISCUSSION

4.1 The Urban Farm as a Symbol of Commitment

In order to make efforts at Taman Medan Cahaya more regular and useful, CItRa collaborated with UMCROPS, the urban farming project parked under the then UM Environmental Secretariat (UMCARES). Leading this initiative was Shalan Jum'at, an amiable community liaison adept at engaging with people of all ages and backgrounds. His ability to effectively win over the attention and commitment of the local women in the community reignited the programme and led to *gotong-royong* events (activities which bring together the entire community in a group effort to complete a task) to revitalise and organise the disparate patches of unruly plots into a consolidated urban farming effort for everyone's benefit. Shalan Jum'at's ability to use and adapt hands-on experience into useful yet simple and cheap methods of farming appealed to the community. Coupled with the writer's positive relationship with the new residents' committee, and his own affable approach to those keen on the project, the farm became a visible symbol of the university's collaboration with the community.

Because the farm is a very visible product of community efforts, other residents who were not directly involved in the programme became aware of available initiatives put forward by the university. When other programmes were subsequently suggested, the goodwill generated by that first visible project engendered a more positive response to other activities.

Diagram 1: Evolution of Programmes at Taman Medan Cahaya Phase II



4.2 From Urban Farming to Aquaculture — Making an Opportunity out of a Problem

One of the issues that arose from the effort to broaden the urban farming effort was the lack of water. During times of regular rainfall, the farm was able to flourish and families were able to reduce some household expenditure by using harvests from the farm for personal consumption. Some excess harvests such as lemongrass and turmeric leaves were sold at resident-owned food stalls. However, when rain was scarce, residents were not able to adequately water their crops. Some brought recycled rice-washing water from their homes, but when the lifts broke down, this was an impossible task for the older women who already struggled to climb up and down the stairs to their apartments. While there was piped water available, it was some way away and there was an issue of payment for the use of a common good.

A solution suggested by UMCROPS was to install rainwater harvesting tanks, as was done at the experimental urban farm site in the university. This suggestion was agreed to, but as the area was at high risk of dengue, the tanks also doubled up as fish tanks to breed a catfish species that was favoured by the communities (as food). With this innovation, nutrient-rich water from the fish tanks, which were put in the middle of the crops was used to water the plants. This allowed useful recycling of the water, which had to be regularly changed for the good of the fish. Rainwater was collected for use in the tanks, which reduced cost to the community in terms of piped water and the effort needed to carry pails of water from the public pipe or their homes. And the fish were raised for sale to the wider community. An unplanned additional bonus that arose from this effort was the involvement of local men – both in the installation of the tanks as well as in its care. The organic farming initiative had thus far only managed to gain the attention and favour of the local women.

This is a classic example of how a problem arising from a community project can be dealt with to subsequently generate many other opportunities and benefits to the wider community.

4.3 Student Involvement in Community Engagement

In order to nurture a concerned and active student population, the University of Malaya strongly encourages its students to get involved with our community networks and give back to society. The student group ENACTUS decided to work with the Taman Medan Cahaya community to strengthen the sale and marketing of products harvested from the farm. However, as part of their initial engagement with the community, they took into account feedback from the local women that they wanted the following:

- i. A solution to the water problem at the farm
- ii. Simple products that could make for sale such as *kerepek* (tapioca chips)

With the guidance of UMCROPS, the ENACTUS group then helped to install more rainwater harvesting tanks, which were connected to the existing fish breeding tanks that were already on site. The bigger tanks placed along the stretch of the farm area made it even easier for the local women to tend to their crops.

The request for simpler products to make for sale probably came as a result of soap and flower-making workshops conducted for the women in 2013. While the women were keen to learn from these workshops and were able to subsequently make flowers to decorate their homes (and reduce their expenditure on false flower purchases during festive seasons), these craft were too tedious for the women to embark on as a small business. They felt that producing simple food would be an endeavour that they could handle, and that would be more popular (in terms of sales) as well as require less capital. Thus a local community group was formed to begin work on the production and sale of tapioca chips. By the end of 2014, this effort generated a side income of about RM200 – based on bi-weekly gatherings to peel, slice and fry the chips by hand.

The strength of this project came from its origins. Its evolution came as a result of expressed interest by the local women. It is also possible to plant and grow the food source in the local farm, so in the long term this could be a wholly local production (although the first harvest would take some time). It is also a low-cost accessible innovation that could expand into useful side income of fund source for the local women.

4.4 Forest Visits for Children

In a collaboration with a UM PhD student under her personal non-profit organisation Tatana Roots, the children of Taman Medan Cahaya were invited to forest immersions at both the Forest Research Institute of Malaysia, Kepong (FRIM) and Rimba Ilmu, UM's botanical garden and forest reserve. These trips allowed the children to spend some time in a completely different environment, and gave them a chance to experience the wild outdoors — a vast change from their regular concrete habitats. These programmes were oversubscribed with even the adults keen to tag along.

A number of older youth were even selected and trained to become urban forest guides – testing out their skills and abilities on the second trip with the community to Rimba Ilmu, and earning them some pocket money on the side. It was clear that this brief immersion into a natural habitat was something that the children truly enjoyed and valued. Even 1.5 years on, they continue to ask for more trips and visits to 'play in the forest'.

4.5 Health and Wellness

Sustainability for an urban community also includes its personal health and wellness. In a collaboration with the Department of Social and Preventive Medicine (SPM) in the Faculty of Medicine, free health screenings were offered to all residents. This was one of the rare times that the local Indian community emerged to participate in the university's engagement programmes. The health screening and awareness programme was held during a community Open Day and was thus a neutral ground for all parties to enjoy.

Since the health screening, SPM has also conducted weekly aerobics classes, as well as an aerobics instructor course that will not only cement local interest in exercise, but ensure that there are local instructors able to conduct classes and an opportunity for them to earn an alternative income.

4.6 Lessons Learnt and Issues to Overcome

It is clear from the above findings that affable and endearing personalities make a difference in effective community engagement. Having community liaison staff who are able to engage with communities on equal terms can be the deciding factor in the success of a community empowerment programme. The ability to draw people together on a project such as the farm or the *kerepek* making enterprise is also of value as it has been shown that real empowerment often only takes place when there is wider community involvement – it rarely occurs in individual efforts (Lord & Hutchison, 1993).

The availability of a visible testament to university commitment in the form of the farm was also essential to reminding the community of past engagement efforts. This then translates into a little bit of trust when other programmes are offered — resulting in better participation and parents' willingness to release their children for programmes arranged specifically for the young.

It is also imperative that programmes are devised according to the expressed needs and desires of the community. The soap and flower-making workshops were conducted because the instructors were available and willing to run programmes for the community. While the community were interested to learn, they were not as practical in terms of business opportunities as they either required capital outlay or more time than the community could afford. The *kerepek* initiative, however, was a low-cost and less threatening effort to embark on as a starter enterprise for the local women. Because of its accessibility, it has proven more successful and attractive and has even led to requests for more exposure and training for successful small businesses related to home-based food production.

There are however myriad issues that still need to be overcome in the community, some of which have no clear solution as yet. Some of these include:

- 1. It occasionally seems like the community is only invigorated to act when they know that university representatives are planning a visit to their site. Perhaps because the writer is in fact a member of the community, his role as part of the university is not enough to spur them to remain constantly committed to the programme. Part of this behaviour might extend from the cultural need to 'keep face' with outsiders. With the writer seen as an 'insider' this need or pressure to 'perform' no longer exists.
- 2. Thus far there has been visible gender inequality amongst participants of the programme. Most volunteers are women and men only occasionally appear when there is heavy infrastructure work to be done or when it has to do with the aquaculture project. This could stem from the fact that most men have full-time jobs and thus are not at home as much as the women, but it could also be very stratified gender roles entrenched in the community.
- 3. Community politics are always an issue in this type of work. There has always been a problem with bickering between various community cliques, and the local women also have their own groups and rivalries even as they come together to participate in the programmes on offer. There is a legacy of racial divisions in this community and though all effort has been done to engage with all ethnicities, some families simply choose to stay away because

they are uncomfortable engaging with those of a different background. The free health screening was more appealing as residents might have felt that there were clear health and cost benefits to gain, but subsequent health interventions such as the aerobics classes did not generate a mixed ethnicity response.

4. No single programme can meet all the needs and requests of an entire community. The university has tackled this by providing a portfolio of programmes for those who are interested to choose from. It is clear that there are differences between the participants for each, with a few who chose to attend all. This shows that many will participate only in those that have a specific appeal to their interests, which endorses the need to ensure that community engagement offerings are varied and holistic.

5. CONCLUSION

Taking sustainability to the communities can cover a vast range of efforts and programmes. Thus far, the University of Malaya has offered information support, organic farming, health interventions, environmental awareness and low-cost business enterprise development programmes with some success. There is much more that can be done. However, to date the focus has been to solidify the method of approach and engagement model in just two blocks (300 households) in the Taman Medan area. These are those closest to our contact on the ground. In 2015, in order to justify more expense on the community, it is imperative that engagement expands to those in the other blocks and terrace houses in the vicinity (about 2000 households) so that many more can benefit from and participate in the programmes on offer. It will be interesting to determine whether these other blocks will be as willing to participate given that they do not yet have a visible emblem of the university's commitment such as the organic farm, but perhaps other noticeable tokens can be devised according the community's expressed needs and wants.

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