THE UNIVERSITY'S ROLE AS AN INTERMEDIARY FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT: THE CASE OF KONDO RAKYAT

Nur Fatehah Raudhah Ariffin, Zeeda Fatimah Mohamad

UMCares – The Community and Sustainability Centre, University of Malaya

fatehah_raudhah@um.edu.my

ABSTRACT

This paper discusses an effort carried out by the University of Malaya (UM) to engage with, facilitate and nurture sustainable development efforts in a neighbouring community. The Kondo Rakyat community in Pantai Dalam, Kuala Lumpur is five minutes away from the UM campus. It is a low-income urban community living in DBKL low-cost flats nestled within an upper middle-income neighbourhood of high-rise condominiums. Efforts were made to launch sustainability initiatives such as composting, the production of eco-enzymes, kitchen gardens and green bazaars with the hope that the community will be able to share the skills learnt and experience gained with other similar communities elsewhere. This paper will show that one of the most vital criteria in an effort such as this is the ability of the project leader to facilitate discussions between disparate collaborators so as to guide the project to some success.

Keywords: Low-income urban community, sustainable development, community engagement

1. INTRODUCTION

"Education for Sustainable Development (ESD)" is the educational process of achieving human development in economic growth, social development, and environmental protection in an inclusive, equitable and secure manner; so it that instigates societal transformation towards sustainable development.

The Tbilisi Declaration in 1977 was the first international declaration on environmental education that recognized the role of university in education for sustainable development. This declaration promotes environmental teaching, research and training, as well as technical, vocational education. It also recognised the essential interdisciplinary nature of environmental education. The Talloires Declaration of 1991 marked the first official commitment made by the top management of universities from over 40 countries to undertake environmental sustainability as a part of their main agenda (ULSF, 2013).

After almost two decades, the role of universities in promoting the sustainable agenda is much stronger and more visible. This can be seen with The Regional Centre of Expertise (RCE) networks that have been set up and designed specifically to strengthen the collaboration of

higher education institution for environmental sustainable development at the regional and local level (Fadeeva & Mochizuki, 2010).

Other collaborations such as the International Sustainable Campus Network (ISCN) that was formally officiated in late 2009, works for a unified approach to share experiences, including measuring and reporting the performance of campus sustainable initiatives in regional/local networks - demonstrating more tangible efforts from universities worldwide (ISCN, 2014).

In the Malaysian context, the call for papers for the 1st Regional Conference on Campus Sustainability with the theme 'Building Sustainability Edge through Institutional Strategy" is a good example of coordinating efforts at the regional level as well as encouraging local higher education institutions to learn and share their experiences in sustainable development initiatives. These myriad initiatives by the universities should be considered an integral part of the sustainable development agenda as they also serve as bridging institutions between government, businesses and society.

The empirical evidence presented in this paper will highlight two main insights into the role of a university as an agent of change. It will also include a discussion on how universities can play its role more effectively to improve education for sustainable development.

This paper is organised into five sections. Following this introductory section, Section 2 provides the overview of the role of universities in fostering sustainable development agenda through a cross-sectoral collaboration through environmental sustainability programmes. Section 3 will explain the methodology used in this work. Section 4 then provides the case study that illustrates the role that the University of Malaya played as an intermediary in the Kondo Rakyat Mesra Alam community programme. The paper ends with the main findings and conclusions.

2 LITERATURE REVIEW

At the moment, there is limited past literature that discusses in detail the role of higher education institutions in education for sustainable development. One investigation done by Jens & Martin (2000) focused on how the university is a hub for the collaboration between local communities and industry players. The authors adapted the National Innovation System (NIS) – with some modification- as their theoretical framework to have a better understanding of the dynamic nature of knowledge transformation in society. The author discussed how universities have the ability to capacity-build communities by giving them knowledge and expertise on matters that can benefit local communities. This paper highlights the role of societies that possess a strong learning ability that can be labelled as the 'auto-learning' process. The 'auto-learning' concept emphasizes societies' (industry players, NGOs, civil society) ability to create, spread and utilize knowledge given to them as well as adapt and modify it to be used in their daily lives.

A study by Karatzoglou (2012) on the evolving role of universities as facilitators for sustainable development partnerships identified a university's main contribution as intermediary based on

their ability to provide Education for Sustainable Development (ESD) to local actors (government bodies, agencies, industrial players, NGOs). This includes:

- Exemplary change in the Universities' own management practices (e.g. their involvement in recycling schemes, energy efficiency initiatives, water conservation practices;
- A platform to encourage students and researchers to integrate, synthesize, use critical reasoning and systems-thinking skills to cope with the diversity of complex challenges of sustainability;
- The university usually assumes a leadership role in coordinating, promoting, and enhancing the engagement of local authorities and other societal stakeholders.

In other literature by Sedlacek (2013), three different functions of universities as facilitators for sustainable development were underlined, including: (1) education (2) research and (3) governance. Through the education platform, universities can be seen as playing a central role in both the individual as well as the social learning systems in sustainable development. Within research, the involvement of universities in multi-disciplinary and transdiciplinary research enabled them to cope with knowledge transfer activities that are aligned with the sustainable development agenda. The third element, governance, showed that the diverse range of university networks (regional/local/ global stakeholders) indicates that they are important actors for multi-stakeholder environmental governance. Therefore, in each of these highlighted functions, universities can contribute to human and social capital as well as economic development in areas aligned to sustainable development agendas. (Sedlacek, 2013, p.78).

3. METHODOLOGY

Empirical evidence is drawn from an in-depth single case study on the role of the University of Malaya as an intermediary for the Kondo Rakyat environmental sustainability programme. The case study method was used in order to understand a real-life phenomenon in-depth by following a set of specific procedures (Yin, 2009).

This qualitative research and analysis is based on data collected from archival reports, videos, pictures, direct observation, semi-structured interviews and systematic writing of research diaries from July 2010 to December 2011.

3.1 The Case Study

Program Mesra Alam Kondo Rakyat is a programme that intends to promote environmentally sustainable practices to the community of Kondo Rakyat Desa Pantai, a low income urban community not far from the University of Malaya.

Kondo Rakyat Desa Pantai comprises 5 blocks of low-cost flats, with a total of 1140 units, situated in the district of Lembah Pantai, Wilayah Persekutuan, Kuala Lumpur, Malaysia. It is one is one of many low-income urban vertical communities that are surrounded by higher-income high-rise communities in the Klang valley. Kondo Rakyat Desa Pantai has a total population of approximately 6,840 people, with 1000 units (87.7 %) with Malay residency, 130

units (11.4%) with Indian residents and the remaining 10 units (0.88%) taken up by foreign immigrants. This vertical community is one of the earliest projects under the People Housing Program under the office of the Kuala Lumpur City Hall (DBKL).

The People's Housing Program (PPR) is a government program for the resettlement of squatters and residence requirements for low-income earners. The National Housing Department in the Ministry of Housing and Local Government is the main implementing agency for PPR projects throughout Malaysia. PPRs comprise two categories, PPR for Rental (PPRS) and PPR for Ownership (PPRM). In the case of Kondo Rakyat Desa Pantai, the apartments are available under the PPR for Ownership scheme. From 2001 onwards, DBKL allowed the community full independence to manage their premises under The Kondo Rakyat Joint Management Body (JMB), lead by Encik Yusri Ahmad and Puan Azizan Shariff.

The Kondo Rakyat Desa Pantai community is a classic example of urban poverty located deep in

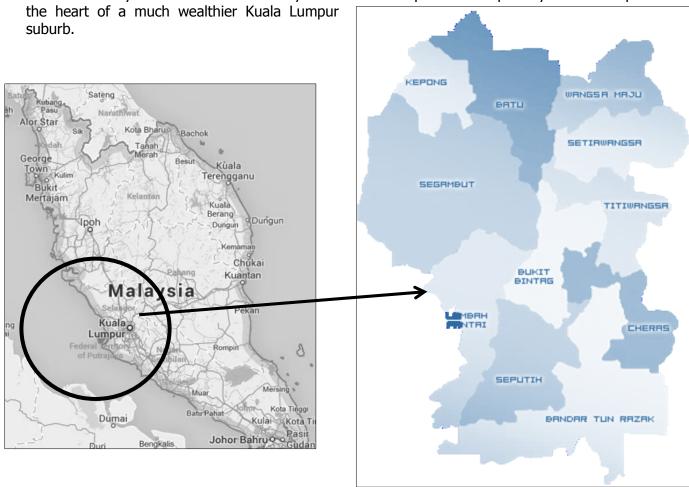


Figure 1: Geographical location of Kondo Rakyat Desa Pantai, Lembah Pantai

The ultimate goal of this project was to develop a model community that could later inspire other similar communities to take action and initiative for environmental sustainability. This programme focused on four elements / sub-programmes: the collection of used cooking oil, the kitchen garden, composting and the green bazaar. Details of each element are given below:

(1) Collection of used-cooking oil:

The main idea behind this project is to set-up a systematic collection of used cooking oil among the Kondo Rakyat community. This used cooking oil can then be sold to the company that produces biofuel. This will not only help to overcome the issue of river pollution (from dumping used cooking oil and other wastes) that the community was dealing with but would also enable the community to understand the concept of biofuel and generate income from it.

(2) Eco-Enzymes

The eco-enzyme project aimed to capacity-build the Kondo Rakyat community to recycle their kitchen waste into a form that can be used for other purposes. Eco-enzymesare a complex solution produced by the fermentation of fresh kitchen waste (fruit and vegetable remains), brown sugar and water. This eco-enzyme can then be applied in daily use as a cleaning agent as well as for agricultural compost.

(3) Kitchen gardens

The objective of the kitchen garden project was to establish plants that were useful in cooking such as herbs, fruits and vegetables that could help to reduce household expenditure. This type of farming is organic, small scale and can be done either by individual residents or by groups of residents.

(4) Green Bazaar

This project intended to create an iconic green bazaar for recyclables and environmentally friendly-based products at Kondo Rakyat. This project would encourage the practice of recycling and entrepreneurship activities amongst the Pantai Dalam community.

3.2 The Stakeholders

Program Mesra Alam Kondo Rakyat was a joint collaboration between the The Environmental Secretariat of University Malaya (UMCARES), TM Berhad and Unilever, both of whom have offices nearby. TM Berhad is the largest integrated information and communications group in Malaysia while Unilever Berhad is a multinational company and global lead supplier of consumer goods.

Both of them committed to the Kondo Rakyat projects and were keen to lend relevant expertise to local stakeholders and sustainability projects. For the Kondo Rakyat program, TM Berhad and Unilever Berhad provided financial assistance and expertise, while UMCARES coordinated the effort and monitored the progress.

3.3 UMCARES as a university intermediary

As a small unit under the chancellery office, UMCARES was launched in 2010 to transform the university into a sustainable campus. The secretariat is very much a bottom-up initiative that uses the strength of the grassroots to drive the university to sustainability. UMCARES at that stage was led by a volunteer coordinator and assistant coordinator — both were University of Malaya academic staff. One contract staff was also appointed also to manage the volunteers' network, collaborators and sponsors.

UMCARES' volunteer networks mostly comprise of both students (undergraduate and postgraduate) and University of Malaya staff (academic and non-academic). This element was essential to drive the university to the status of a sustainable campus. For Kondo Rakyat collaboration purposes, UMCARES had aligned this project into a research based programme with several researchers involved, as well as two graduate research assistants.

3.4 Regular Stakeholder Meetings

The stakeholders meetings were carried out between 2010 and 2011. There were nine (9) stakeholder formal meetings done to garner participation, commitment as well as to derive a consensus on the planned environmental sustainability programme. The list of meetings held are as follows;

	DATE	MEETING DESCRIPTION
1.	13 th July 2010	Induction Meeting
2.	9 th March 2011	Discussion on shortlisted sustainability project proposal and mechanism
3.	8 th April 2011	Review and discussion of the content of the sustainability projects proposal
4.	29 th April 2011	Discussion of progress on training and demonstration
5.	7 th May 2011	Special meeting on Green Bazaar 1 projects
6.	8 th July 2011	Post-mortem, enhancement and status of sustainability projects
7.	5 th October 2011	Special meeting on Green Bazaar 2 projects
8.	24 th October 2011	Special meeting on Green Bazaar 2 projects
9.	15 th December 2011	Feedback and planning the way forward

4. FINDINGS AND DISCUSSION

Empirical evidence from this research has illustrated the various ways in which universities play an intermediary role in collaborations for environmental sustainability. Based on this empirical evidence, a number of insights and lessons learned from this collaboration are discussed below.

4.1 The university as a key player at the beginning of the programme

Initially the stakeholders intended to do a one-off environmental programme with the Kondo Rakyat community. With the advice of the UMCARES coordinator at the time, the business partners agreed on a much more intensive and conducive programme for at least one year. As

mentioned earlier, the objective of this one year programme was not only to develop a strong and environmentally conscious community but also to set up a model of an environmentally sustainable community that could inspire, encourage and extend similar transformation to other low-income urban areas.

Before any decisions were made on the type of sub-programmes that the Kondo Rakyat community could do, it was important to first recognize the type of environmental problems that occurred in the community. Hence, during the first stakeholders' meeting on 27th July 2010, community leaders of Kondo Rakyat outlined several issues associated with the environmental problems on-site. This included the problems of indiscriminate disposal of used cooking oil, little greening initiatives on their grounds and lots of unwanted items that had a potential to be reused and sold in order to generate an alternative income. Thus, the selection of ideas for the Kondo Rakyat environmental sub-programme (used cooking oil collection, ecoenzyme, kitchen garden and green bazaar) were based on the problems highlighted by the community themselves.

In order to meet the needs of the community, the selection of ideas for the sub-programme were the result of facilitation and guidance from the University of Malaya (UMCARES) representatives which comprised a mixture of academic staff volunteers from various backgrounds; economy, chemical engineering, environmental management and science & technology policy. The UM experts intended to solve the environmental problems that the Kondo Rakyat community had with the best solutions that they could suggest based on their field of research. Some of these ideas or sub-programmes may or may not have been adopted by any other community. Therefore, it was hoped that the Kondo Rakyat community could implement the suggestions and make the sub-programmes successful by adopted it in their daily activities.

4.2 A leading role in coordinating, promoting, and enhancing engagement in the Kondo Rakyat collaboration

Regular meetings and visits with the stakeholders of the Kondo Rakyat programme were needed to make sure that the sub-programme was implemented by the Kondo Rakyat community. Most of these regular meetings (seven out of nine meetings) were led by the UMCARES representatives and the UMCares coordinator of the time, Prof Dr. Abd Aziz Abd Raman. The role of Prof. Dr. Aziz as the chairperson was important due to his vast experience in deal with the business partner and the community. His ability to communicate effectively, facilitate the partners' discussion coupled with his ability to understand each partner's perspectives enabled the collaborators to reach a consensus within a short period of time. His role as the chairperson was indeed important as it was sometimes difficult to reach a mutual understanding between the partners. This factor was highlighted during an interview with one of the business partners, who said, "... Prof. Aziz definitely makes a good leader or chairman, because Prof. can look into certain things that maybe other partners will not look into..." (T2: Business partners Interview)

4.3 Moving the collaboration towards an auto-learning society

Another significant finding that illustrated the role of UMCARES as a bridging institution in the environmental sustainability programme is the capability to turn the Kondo Rakyat collaboration into an auto-learning society. This evidence can be seen in the demonstration and practical training for eco-enzyme and compost programme that was held in May 2011. During this time, UMCARES provided the necessary expertise for the sub-programmes. Two trainers were brought in to teach the community the appropriate skills and knowledge on composting and the production of eco-enzymes. Both the stakeholders (business actors) and the community were there for the capacity-building sessions. After the demonstration and practical sessions conducted by the experts, the community had modify the knowledge given so that it could be used in their daily lives. The community showed that they were able to do this as soon after, they began to commercially produce their own eco-enzymesfor sale to other neighbouring communities.

The table below summarizes the empirical evidence found in the Kondo Rakyat collaboration.

The table below summarizes the empirical evidence found in the Kondo Rakyat collaboration.			
Evidence from the Kondo Rakyat Case	University role as Intermediary		
INITIATOR University plays an important role at the beginning of the project in determining the type and timing for execution of the environmental programme	University as a development hub		
University had the expertise to advise and guide the community and business partners in the selection of the sub-programme			
MEDIATOR The role of Prof. Dr. Aziz as chairperson in meetings showed that the university was able to mediate between various interests and intentions to come to a consensus for the community's benefit	Universities are key-players in coordinating, leading and engaging the collaboration		
MOTIVATOR The ability of the Kondo Rakyat community to adapt, modify and expand the ideas gained in the programme in their daily activities and to the surrounding neighbourhood	As an initiator to move the community towards an auto-learning society		

5. CONCLUSION

Based on the evidence from the Kondo Rakyat CSR environmental sustainability initiative, a clear picture can be seen of understanding the role of the university as an intermediary in a sustainability programme. The findings could assist other organizations to achieve more effective collaborations and efforts that comprise similar stakeholder components. Other than

the business sector - educational institutions, NGO's and local governments can also appreciate and recognize the potential of the collaborative approach in enhancing environmental sustainability projects. However, more investigation will need to be done to ascertain the added value of this type of collaborative approach as a useful platform to achieve sustainable development.

REFERENCES

Jens A. H. & Martin., L. (2006) Agents of change: universities as development hubs. Cleaner Production, 14 820-829.

Karatzoglou., B. (2012). An in-depth literature review of the evolving roles and contributions of universities to Education for Sustainable Development. Cleaner Production 49, 44-53.

Sedlacek, S. (2013) The role of universities in fostering sustainable development at the regional level. Cleaner Production, 48 (2013) 74-84.

Source: UMS Website: Retrieved 13 March 2014

https://www.ums.edu.my/ecomc/images/1rccs2014.pdf

http://www.ulsf.org/programs_talloires.html41-48.

United, N. (1992). Report of the United Nations Conference on Environment and Development (D. o. E. a. S. Affairs, Trans.) (Vol. 1). Rio de Janeiro: united nations.

Rondinelli, D. A., & London, T. (2003). How corporations and environmental groups cooperate: Assessing cross-sector alliances and collaborations. The Academy of Management Executive (1993-2005), 61-76.