



## Working with Local Communities in Sabah, Malaysia: Developing a Waste Education Programme

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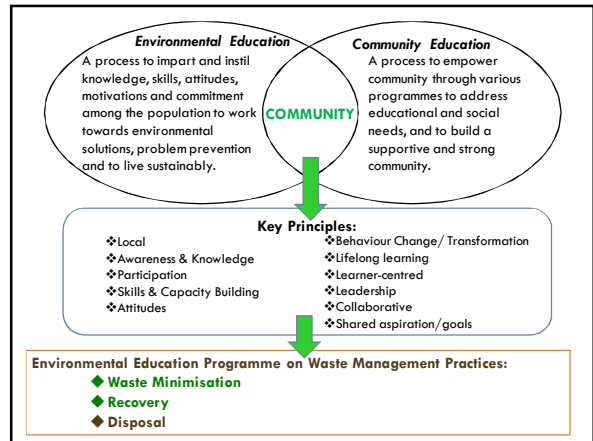
## The Research

- > One of the ways to improve waste management is through **community environmental education**.
- > In this research, local communities are villagers and independent oil palm smallholders.
- > The oil palm industry is one of the major agricultural activities in Malaysia.




## Overview

- > The Research
- > Methodology
- > The Research Design
- > Findings: Stage 1 (Data Collection)
- > Developing Community EE Programme based on Themes from Stage 1 Data
- > Community EE Programme on Waste Management Practices
- > Initial Findings : Stage 2 (Programme Implementation)
- > Conclusion

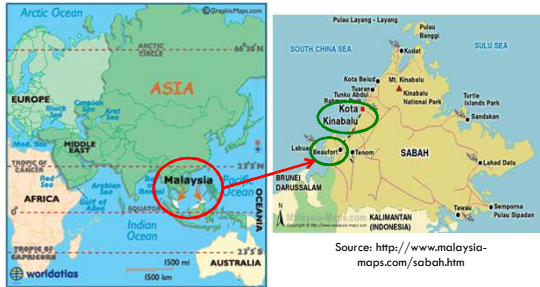


## The Research

- > Waste disposal seems to be a common and simple problem...
  - > yet its effects transcend all environmental boundaries to contribute to water, air and land pollution
- > Managing waste well, in affordable and sustainable ways is among the key challenges faced by many countries.
- > In rural areas, waste collection services unavailable or limited.



## The Research: Location



Source: <http://www.malaysia-maps.com/sabah.htm>

Source: <http://www.worldatlas.com/webimage/countrys/asia/my.htm>

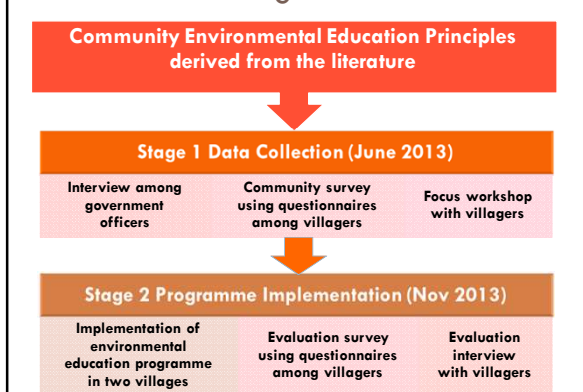
## Methodology

- Critical Theory Paradigm
- Data collection methods:
  - Interviews, questionnaire survey, focus workshop & panel discussions
- Data analysis :
  - thematic analysis
  - descriptive statistics

## Findings: Stage 1 (Data Collection)

- Awareness and knowledge, and attitude:
  - Key barriers to improve waste management
    - complacency
    - ignorance
    - dependence on government initiatives
    - lack of support, understanding, knowledge and awareness
    - lack of waste collection services

## The Research Design



## Findings: Stage 1 (Data Collection)

- Lifelong learning, learner-centred and shared aspiration/goals:
  - A need for continuous provision of knowledge on waste management
  - Importance of self-awareness on waste management
  - Villagers set aspiration and goals towards better waste management practices during focus workshop



## Findings: Stage 1 (Data Collection)

At this stage, key principles observed and some main findings are:

- Local and Participation:
  - Emphasis on participation of local communities and relevant stakeholders, and instilling a strong sense of responsibility
- Awareness and knowledge, and attitude:
  - Villagers interested to improve awareness and knowledge
  - Strong emphasis on importance of education and awareness
  - Villagers: Importance of the environment revolved around themselves, such as health and cleanliness

## Findings: Stage 1 (Data Collection)

- Behaviour Change/Transformation:
  - Some existing local communities' efforts and environmental campaigns have been successful (e.g. reduced usage of plastic bags)
- Leadership:
  - Promising participation of village and oil palm smallholder leaders
- Collaborative:
  - Good rapport among the villagers



### Developing Community EE Programme based on Themes from Stage 1 Data

- > Willingness to participate in programme (>80% villagers)
- > Key themes from Stage 1 data:
  - > Environmental and waste management perceptions
  - > Environmental policies
  - > Continuous education and awareness (Education, Actions, Programmes)
  - > Waste behaviours.
- > Community empowerment is the key approach.
- > Theme of environmental education programme : Healthy Environment, Healthy People, Healthy Future.

Mini poster in Malay (finalised after discussion with communities)



### Community EE Programme on Waste Management Practices

12 November 2013 (Tuesday) at Lawa Village  
13 November 2013 (Wednesday) at Lupak Village

Time	Activity
8:30 am	Registration
9:00 am	Talk on "Healthy Environment, Healthy People, Healthy Future" by Susan Pudin
9:45 am	Panel Discussion & Discussion on mini poster
10:35 am	Community survey – evaluation questionnaire
11:00 am	Light refreshment & Lucky draw End of programme

### Community EE Programme at Lawa Village, Beaufort



### Community EE Programme on Waste Management Practices

- > Contents of talk:
  - > Introduction (some results from community survey, importance of the environment, eco-system services)
  - > Impacts of Waste on Environment & Health
  - > Waste Minimisation, Recovery & Proper Disposal
  - > Conclusion (Healthy Environment, Healthy People, Healthy Future)

### Community EE Programme at Lawa Village, Beaufort



Community EE Programme at Lawa Village, Beaufort



Community EE Programme at Lupak Village, Beaufort



Community EE Programme at Lupak Village, Beaufort



Community EE Programme: Villagers' Experiences

Responses from some villagers when asked how they felt about the EE programme:

"For me it was good. Actually, it was the first time such programme has been carried out in my village." - Azizah

"For me, the programme was very appropriate and very good for the local communities." - Fikri

"It was okay but it's a little bit difficult in villages. There are people who are not responsible." - Zarina

"It gave ideas to the villagers, a chance to discuss about problems. I hope the villagers have better awareness." - Satar

Community EE Programme at Lupak Village, Beaufort



Community EE Programme: Villagers' Experiences

Some responses in the evaluation questionnaire...

Most villagers agreed that :

"The environmental education programme was beneficial for me."

"I understand better the impacts of waste on health and people, plants, animals, rivers and oceans."

"I understand that my community has an important role in improving waste management in our village."

### Initial Findings: Stage 2 (Programme Implementation & Evaluation)

- Key themes from Stage 2 data:
  - Perception
  - Education and awareness
  - Waste behaviours
  - Co-operation
  - Change

### Initial Findings: Stage 2 (Programme Implementation & Evaluation)

- Behaviour Change/Transformation:
  - Slight improvement in waste practices
  - Priority for change
  - Change takes time
- Lifelong learning & Learner-centred:
  - Willingness to continue learning and improve waste management (at home and plantations)

### Initial Findings: Stage 2 (Programme Implementation & Evaluation)

At this stage, key principles observed and some initial findings are:

- Local and Participation
  - The programme customised and conducted in the two villages was seen as useful, appropriate and important by the local communities
  - Some suggestions by villagers:
    - Organise environmental activities to encourage community participation
    - Formation of a local committee in the village

### Initial Findings: Stage 2 (Programme Implementation & Evaluation)

- Leadership
  - Important roles of village heads, Village Development and Safety Committee, heads of family and individuals as leaders
- Collaborative
  - A good rapport among participants
  - However, there is still lack of support and co-operation from wider communities
  - Created a bridge between communities and relevant government departments (e.g. potential provision of waste collection services, seed money for programme)

### Initial Findings: Stage 2 (Programme Implementation & Evaluation)

- Awareness and knowledge, and attitude:
  - Villagers who participated in the programme expressed that:
    - they have learned more about cleanliness and air quality
    - It gave them ideas and examples for waste management improvements
    - Perceptions of waste management changed
  - Key barriers:
    - lack of awareness and understanding, irresponsible attitudes, lack of actions and no waste collection services

### Conclusion

- Overall, the community EE programme implementation was successful
- Improvement of waste management practices in the future may encounter a series of challenges
- But, with the presence of villagers who are positive towards change, there is still hope!
- What next?
  - In-depth data analysis continues
  - Follow-up phone interviews with villagers (March 2014)
  - Thesis writing