



Education for Water Sustainability: Empowerment and Engagement under Formal Education and Community Settings

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BACKGROUND

- Established in 1998
- Malaysian Non-profit Organisation (Reg. no. 473058-T)
- Tax exemption on donations (since 2007)
- Supports information exchange & capacity building as well as undertaking strategic projects particularly in developing countries
- Works in partnership with other like-minded agencies

MISSION

- To support the protection of the environment and sustainable use of natural resources to meet local, regional and global needs, through strategic partnerships with communities and like-minded organizations.

PROGRAMME

RIVER CARE - river rehabilitation, water conservation, IRBM, environmental education programme based on brown issues

FOREST & COASTAL - forest & wetlands rehabilitation, sustainable management, biodiversity protection, climate change mitigation

PEATLAND - sustainable management of peatlands, climate change mitigation, haze prevention

OUTREACH & PARTNERSHIP - capacity building, awareness raising, info exchange

RIVER CARE PROGRAMME

Introduction

Mission: Promote the protection, restoration and sustainable use of rivers by enhancing multi-stakeholder participation and knowledge to stimulate local action.

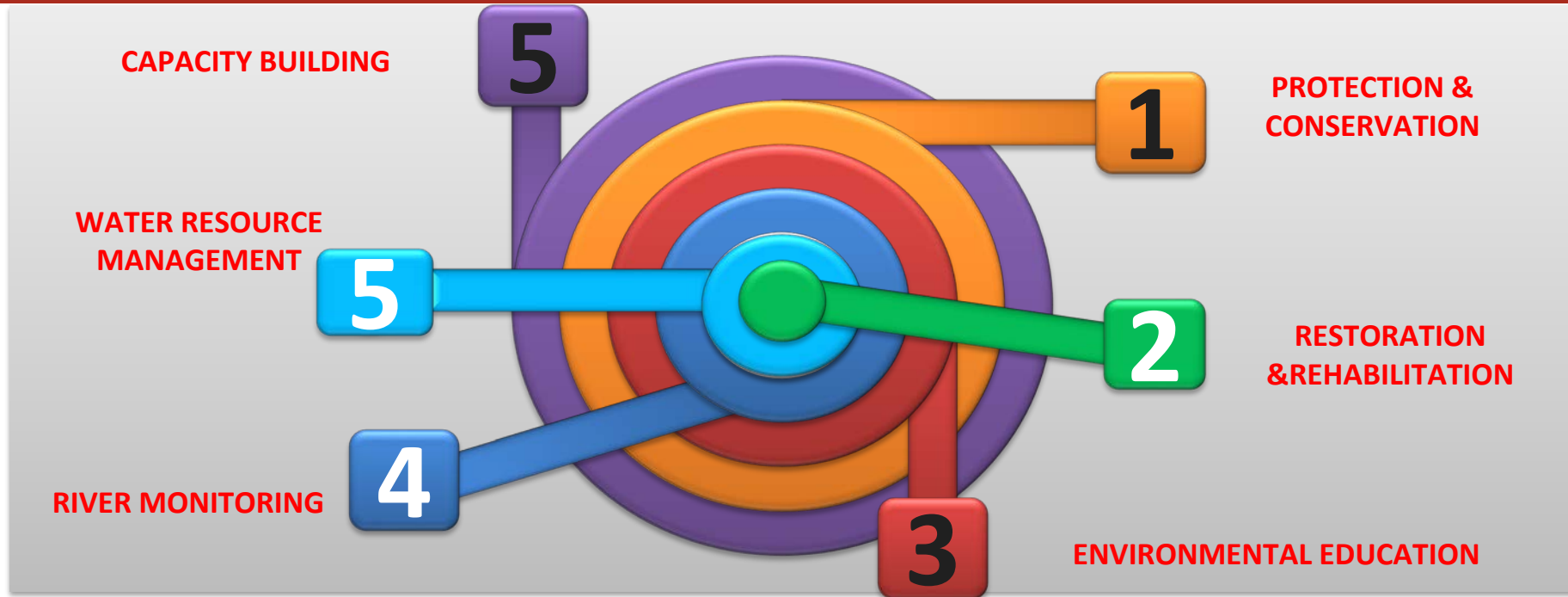
Vision : To have clean, healthy, living and vibrant rivers for people and the environment.



Area		
PROTECTION & CONSERVATION Assist & support the protection & conservation of any catchment & Clean river	RESTORATION & REHABILITATION Promote & support integrated river basin management & biological restoration	EDUCATION & AWARENESS Nurtures caring, leadership skills, & critical thinking, & draws people of wide-ranging ethnic groups, cultures, and abilities into efforts to protect our environment.
RIVER MONITORING Promote localised river monitoring & ownership among our communities	CAPACITY BUILDING Empowering local communities & other stakeholders to address river	PROGRAMME Develop & implementation of systematic programme

RIVER CARE PROGRAMME

Working Area & Type Of Programmes



2002



2004



2007



2014



2015



2015



2016



2019

ENVIRONMENTAL EDUCATION

Components & Work Area

Module

- RIVER Ranger Module
- SMART Ranger Module
- Dr H2O
- FLOOD Ranger Module
- RIVER Guide Action Book

Tools

- River Report Card
- Lake Report Card
- DrH2O Water Auditing Calculator & Toolbox
- Grab Bag & 72H Kit



Reconnect to Nature

- River Address

River Monitoring

- River Report card, Lake report card, water testing kits, river auditing tools, pollution mapping, YSI meter (probe)

Water Conservation

- DrH2O Kit (Water Saving kits, Checklist, water Audit), Water Conservation Module

River Education

- Interactive board (ROLPOP5)
- Mobile River Care Unit (MRCU)
- Interactive River Games

River Monitoring & Sharing

- RIVER Ranger Website, WhatsApp's, Facebook, twitter, Citizen's Eyes App

WORK AREA

EE SCOPE AND TYPE OF PROGRAMME

EE Programme based on Brown Issues

EE Scope

Green
Issues

Brown
Issues

GEC is focusing on brown issues that are synonymous with water and local community participation related projects.

Education Based



**General EE Awareness & Information –
Talk , Exhibition, Workshop**



**Specific Resource Based Education –
Water Conservation**



**Specific Issue Based Education – No
Plastic Campaign**



**Specific Environment Day Events –
World River's Day**

Activity Based



**Local Community Participation based
Programme – Friends of Rivers**



**Resource based Programme – River
Rehabilitation & Restoration**



Youth Programme – Volunteering



**Corporate Social Responsibility based
programme - Clean Up/My Drain Day**

RCP EDUCATION MATERIALS

Tools and Materials

RIVER Ranger Kit

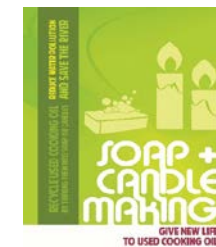
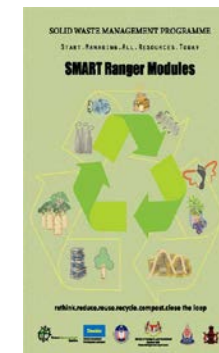
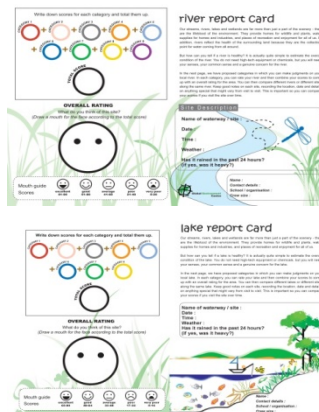


DrH2O Kit



FLOOD Ranger Kit
(72H Kit & Grab Bag)

SMART Ranger Kit





RCP EE PROGRAMME

<http://www.riverranger.my/index.cfm?&menuid=10>



RIVER Ranger Website

E- LEARNIING Material



SMART Ranger (<http://www.smartranger.net/>)

- Programme focused on natural and non-natural resource management in Malaysia. The SMART Ranger Programme promotes the Zero Waste Concept and Waste Minimisation as its main approach towards develop a proper system for a Waste Management Programme for Schools dan local communities



RIVER Ranger (<http://www.riverranger.my/>)

- RIVER Ranger is a comprehensive program on water resource management, which focuses on rivers and river basin management. It also emphasizes not only about water pollution but every aspect of freshwater ecosystems including the functions, values, biodiversity and benefits to mankind.



DrH2O (<http://www.riverranger.my/drh2o/>)

The programme aimed to instill good water conservation behavior among students through three (3) approaches:

- (1) Systematic water auditing,
- (2) Sustainable water conservation initiative and
- (3) Virtual water / Water footprint



Flood Ranger

(<http://www.riverranger.my/FloodRanger/>)

- The programme aimed to educate the community and getting them to understand both the structural measures and the non-structural measures that being implemented in flood mitigation by the government.

EXAMPLES OF EE PROGRAMMES

RIVER RANGER



SMART Ranger Programme



RIVER Ranger Programme



FLOOD Ranger Programme



Dr H2O Programme



PARTNERSHIP

Our Programmes are recognized and carried out with the support of the Ministry of Education and State Education Department and other agencies



STATE EDUCATION DEPARTMENT



SPAN



SWCorp MALAYSIA



LUAS



FORESTRY DEPARTMENT



DEPARTMENT OF IRRIGATION &
DRAINAGE MALAYSIA



DEPARTMENT OF ENVIRONMENT
MALAYSIA



MINISTRY OF FEDERAL
TERRITORITY



MINISTRY OF WATER, LAND AND NATURAL
RESOURCES, MINISTRY OF FEDERAL
TERRITORITY

WATER CONSERVATION PROGRAMME AT SCHOOLS

Case Study 1



- Project involved 19 agencies, 30 schools throughout Malaysia.
- Students conducted pre and post audit of water usage per capita per day



Students get crash course on water conservation

By NABILA AHMAD
newsdesk@thestar.com.my

JOHOR BARU: A group of 120 school students was given a crash course on water conservation and its importance to society particularly during the current hot and dry spell plaguing the country.

Maktab Sultan Abu Bakar Form Four student Mohd Faiq Mohd Farhan Chua, 16, said that he was surprised to know that Malaysia exceeded the recommended water usage in 2013.

"Maybe I am one of the thousands of people in the country who are wasting water and contributed to this figure."

"I have to admit, I have never thought about saving water: For example, I usually



Informative event: Both Harriesh and Shum found the programme educational.

leave the water running whenever I am watering the plants or washing cars at home," he said.

An Upper Six student from SMK (P) Sultan Ibrahim Shum Chen Yau, 19, said that she had

always been aware of such a campaign and would continue to practise water saving in the future.

"I always notice such advertisements and campaigns posted on social media on saving the environment but never focused on such matters until I realised that we are facing water problems. I will surely give attention to it after this," she said.

Year Four SJK (D) Taman Tun Aminah student T. Harriesh, 10, said that the programme made him realise that all individuals should take part conserving water to ensure sustainable resource management.

"I always take a long shower every day as I thought it will not affect the environment."

"But after the programme, I realise that everyone should take part in water

conservation, even a boy like me," Harriesh said.

The three students were part of a workshop organised by the Global Environment Centre (GEC) in collaboration with the National Water Service Commission, HSBC Bank Malaysia Berhad and the Education Ministry.

GEC's river care programme coordinator Dr K. Kalithasan said apart from the seminar, the programme also included water auditing for some schools.

Each school will be given a minimum of a RM1,000 seed grant to initiate water conservation action plans such as rain water harvesting as well as auditing the usage of water in schools canteen, laboratories, toilets, praying rooms and other areas, he said.

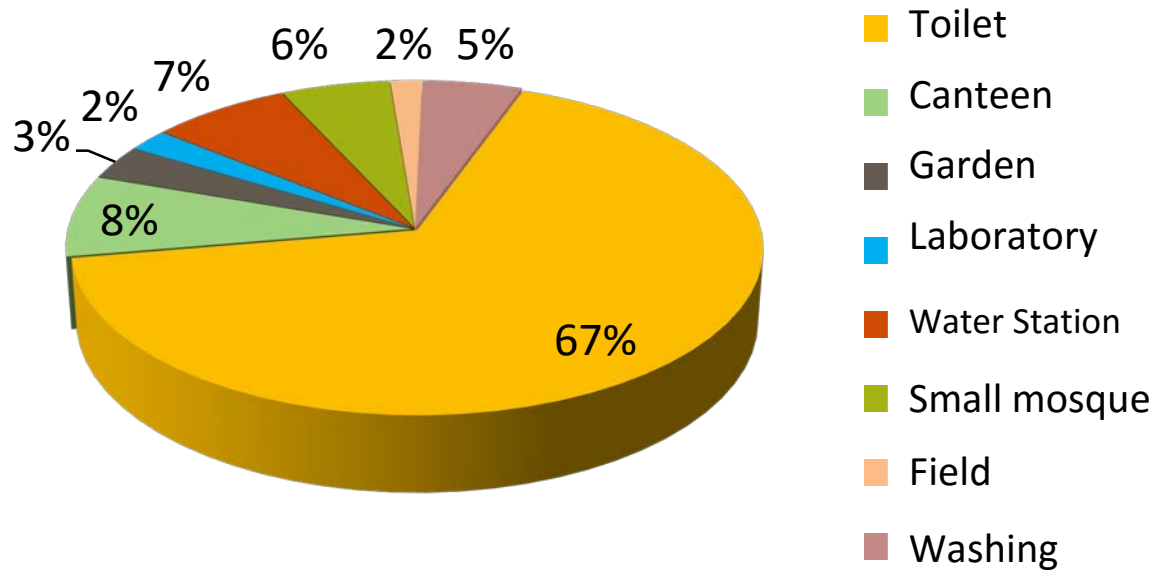
Learning to conserve water



WATER CONSERVATION INITIATIVES

Highest water wasted in the toilet

Average of the water usage for 30 schools in Peninsular Malaysia 3 years data 2014-2016



RIVER RANGER PROGRAMME AT SCHOOLS

Case Study 2

700 students & Teachers from 2004- 2019 were trained as RIVER Rangers



RIVER RANGER PROGRAMME AT SCHOOLS

Other Initiatives



TOT Training for WMGC



Visit to RRC, Open Classroom



Exhibition and demonstration on recycled art during hari bersama Kariah



Outreach Green initiatives



Visit to Surau Al- Husna



Training on turning used cooking oils into candles



3R bin Recycling and recycle air wuduk (mosque)



Visit to Recycling Factory in Balakong



Japanese Delegates visit under LA21 DBKL



DBKL - WMGC Recycling Corner

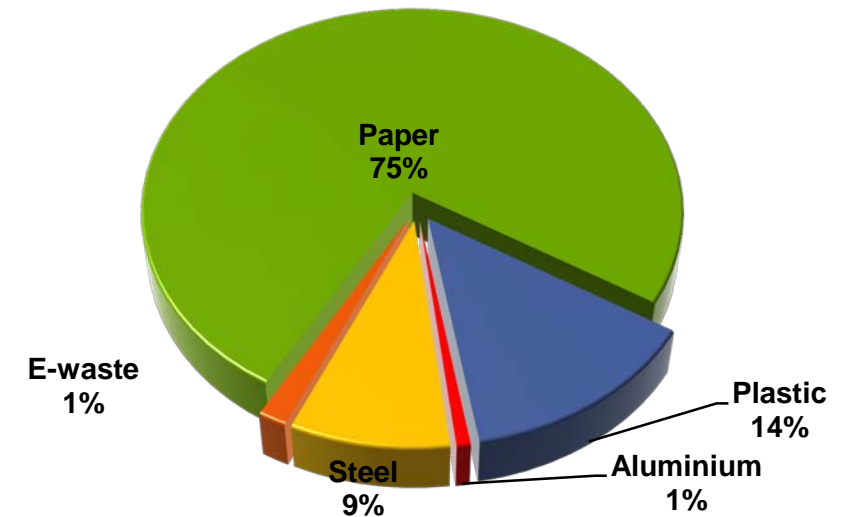


BERNAMA media coverage

RECYCLE FOR LIFE IN SCHOOLS

Case Study 3

- Collaboration project with **Coca-Cola Foundation and Recycle for Life Sdn Bhd**
- **2 years** (2019-2020) and to be sustained by the schools involve **80 secondary schools, local communities and agencies** within Klang Valley (KL, PJ, Klang).
- There are 3 agencies (JPNIN, MPAJ, MPK) , 18 communities, 35 schools that has registered and is currently undertaking the project.
- In total more than 5.3 tons of recyclables was collected in 2018. In addition to the recyclables (paper, steels, plastics and Aluminium), 170 units of e- waste from schools and 149 units from local communities was collected.





OUR VISION

- We envisage to have clean and living rivers again
- River banks are covered with native vegetation and are home to many native animals.
- People live harmoniously with rivers
- The river will again be an attractive place and enjoyed by the public
- Sustainable irrigation and agriculture practices that benefits all including the environment



THANK YOU

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