

# 'Go Green on Lamma Island' Programme Series (2): Low Carbon Lifestyle

## Field Trip Activities on Lamma Island

Name: \_\_\_\_\_ ( ) S. \_\_\_\_\_ Date: \_\_\_\_\_

### Stop 1 Yung Shue Wan Main Street

#### Part 1 Rubbish - what's the solution?

1. What sustainable method is used to deal with waste in Yung Shue Wan?

Separation of waste for recycling.

2. List three benefits of using the method mentioned in Question 1.

i. Reduce environmental damage caused by extracting natural resources, e.g. wood, oil.

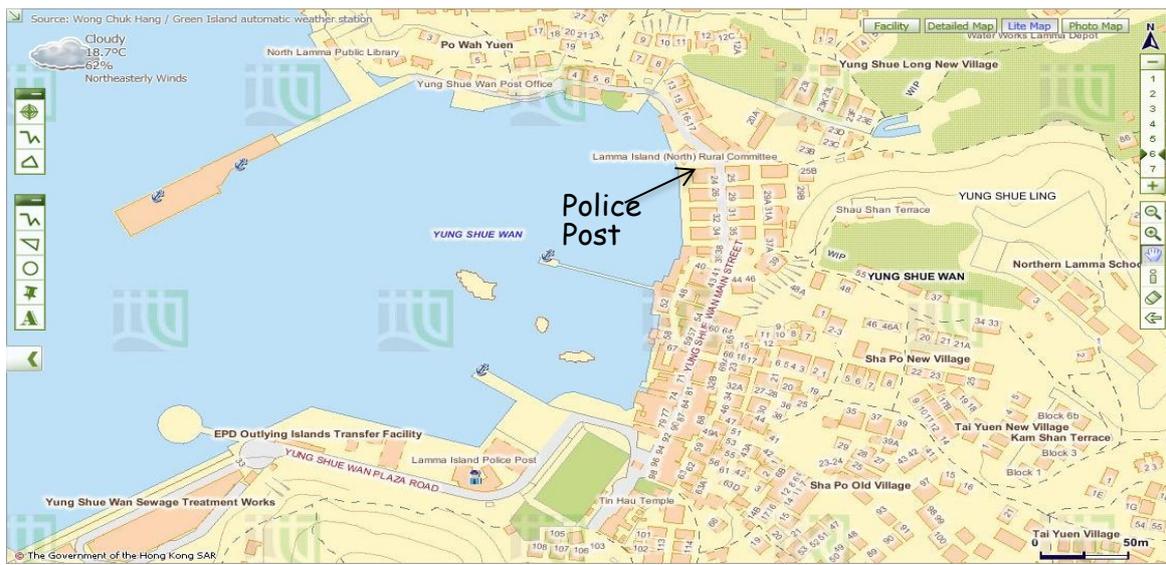
ii. Conserve natural resources.

iii. Reduce waste disposal and the pressure on landfills.

3. Work in groups and walk along the main street. Find out the collection points for recyclable materials. On the map below (Figure 1), mark and label the area where they are for each of the following products with corresponding letters.

- (a) Paper      (b) Plastics      (c) Metals      (d) Glass bottles  
(e) Rechargeable batteries      (f) Clothes      (g) Small electrical appliances

**Figure 1**



Map from Lands Department

4. Evaluate whether the waste separation and recycling scheme is successful:
- (a) Are all items mentioned in Question 3 collected for recycling? If not, which item(s) is / are not collected?  
Any reasonable answers.
  - (b) Are recycling collection points accessible? Any reasonable answers.
  - (c) Are recycling collection points enough for the public? Give evidence to support your answer.  
Any reasonable answers.



5. Suggest two ways to improve the scheme so that more people, including visitors use it more often.
- i. Increase the number of recycling collection points.
  - ii. Provide more types of recycling bins for recycling rechargeable batteries and small electrical appliances.  
or any reasonable answers.

### **Part 2 Closed loop recycling - what is it?**

Visit 'Lamma Corner'.

1. Find out what three types of recyclable materials mentioned in Part I Question 3 are used for making the items.

Recyclable materials	Uses (Give at least one example)
Glass	Bracelets
Plastic bottles	Decoration
Cloth	Bags
<u>or any reasonable answers</u>	

2. Figure 2 shows the closed loop recycling that is practised on Lamma Island.

**Figure 2**



The closed loop recycling involves three processes, including

- (a) Collecting waste for recycling
- (b) Manufacturing recycled materials into new products
- (c) Purchasing recycled-content products

3. How can this closed loop recycling help combat climate change?

- Less waste is disposed in landfills and thus less methane is produced.
- Reduce the energy used during extraction of natural resources and manufacturing. As there are less fossil fuels being burned, emission of carbon dioxide is reduced.
- Reduce air pollution during manufacturing.

or any reasonable answers.

4. As a consumer, what roles should you play in the recycling loop to help combat climate change?

- Collect recyclable materials.
- Purchase recycled-content products.

or any reasonable answers.

THINK



5. Do you think that all recyclable materials collected can enter the loop of recycling? Why?

No.

- The product is low value-added.
- Difficult and expensive to retrieve materials for processing.
- Lack of technical support.

or any reasonable answers.

6. (a) If the recyclable materials cannot be used for recycling, where will they go?

Landfills.

(b) Do you think all the recyclable materials are recycled locally in Hong Kong? Why?

No, recycling industry is not profitable in Hong Kong.



(c) Taking into consideration of your answers in (a) and (b), do you think recycling is a good way to combat climate change? Why? What else can we do to combat climate change?

- Yes, less waste goes to landfills. /No, reduce, reuse and replace are better than recycling as energy is used in the recycling process.
  - Save energy.
  - Take public transport.
- or any reasonable answers.

### **Part 3 Eco shopping**

Work in groups and walk along the street.

1. Go to one of the green shops and select two types of packaged food that you think they are environmentally-friendly. Complete the following table based on the information on their labels.

	Food A	Food B
(a) Name of food		
(b) Is the food homemade? If not, where is it produced?	<input type="checkbox"/> Yes <input type="checkbox"/> No If no, <input type="checkbox"/> Hong Kong <input type="checkbox"/> The Mainland <input type="checkbox"/> Other countries	<input type="checkbox"/> Yes <input type="checkbox"/> No If no, <input type="checkbox"/> Hong Kong <input type="checkbox"/> The Mainland <input type="checkbox"/> Other countries
(c) Is the food made from organic farms?		
(d) Number of ingredients		
(e) Do the ingredients come from plants or animals? Give two examples.	<input type="checkbox"/> Plants <input type="checkbox"/> Animals <input type="checkbox"/> Both Examples: _____ _____	<input type="checkbox"/> Plants <input type="checkbox"/> Animals <input type="checkbox"/> Both Examples: _____ _____
(f) What is/are	<input type="checkbox"/> plastic bag	<input type="checkbox"/> plastic bag

the packaging material(s)?	<input type="checkbox"/> paper <input type="checkbox"/> others _____	<input type="checkbox"/> paper <input type="checkbox"/> others: _____
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**PLAN**



2. Which food would you like to buy in order to reduce more carbon emission? Give three reasons to support your answers.

Any reasonable answers.

**Stop 2 A Local Farm**

1. Work in groups. Observe the operation of this farm and interview the farmer. Complete the following table.

Questions	Answers
(a) How to improve soil quality?	<input type="checkbox"/> using chemical fertiliser <input checked="" type="checkbox"/> using compost <input checked="" type="checkbox"/> covering soil with mulches <input checked="" type="checkbox"/> crop rotation <input checked="" type="checkbox"/> fallowing <input checked="" type="checkbox"/> agroforestry: trees are grown with crops <input type="checkbox"/> others _____
(b) How to avoid pest?	<input checked="" type="checkbox"/> using chemical pesticide <input checked="" type="checkbox"/> using CD-ROMs <input type="checkbox"/> using plastic balls <input checked="" type="checkbox"/> growing different types of crops <input checked="" type="checkbox"/> crop rotation <input checked="" type="checkbox"/> growing companion crops <input checked="" type="checkbox"/> using insect trap <input type="checkbox"/> others _____
(c) How to use water resource?	<input checked="" type="checkbox"/> constructing wells <input checked="" type="checkbox"/> building water tanks or ponds <input checked="" type="checkbox"/> covering soil with organic matter <input type="checkbox"/> using drip irrigation <input type="checkbox"/> others _____
(d) What tools are used for farming?	<input checked="" type="checkbox"/> using simple tools, e.g. <u>hoe</u> <input type="checkbox"/> using machines, e.g. _____
(e) What is the useful output?	<input checked="" type="checkbox"/> crops, e.g. <u>tomatoes, lettuce</u> <input type="checkbox"/> animal products, e.g. _____

2. Do you think this way of operation of farm can reduce carbon emissions? Give reasons.

	Can it help to reduce carbon emission? Put '✓' or 'x'	If yes, how can this help to reduce carbon emission?
(a) Way of improving soil quality	✓	<u>Answer for (a), (c) and (d):</u> <u>Less fossil fuels are used to make fertilisers and generate electricity to pump water and drive machines. As there are less fossil fuels being burned, emission of carbon dioxide is reduced.</u>
(b) Way of avoiding pest	x	
(c) Way of using water resource	✓	
(d) Tools used for farming	✓	
(e) Type of output	✓	
		<u>Vegetables</u> <ul style="list-style-type: none"> <li><u>No livestock is reared, thus reducing the production of methane.</u></li> </ul>

THINK



3. Would you like to buy agricultural produce grown in this type of farm for reducing climate change? Give reasons to support your answers.

Yes.

- It is because the soil is not fertilised by chemicals and therefore it does not pose a health risk.
- Less pollution is created as there are no fossil fuels being burned.

or any reasonable answers.

### Stop 3 Hung Shing Yeh Beach Tree Planting Site

1. Read the information from an interpretive plate. What are the two types of

trees? Give one example of each type of trees.

Type	Example
Exotic species	Earleaf Acacia
Native Species	Ivy Tree

2. Which type of trees is chosen for plantation at this site? Why?

Exotic Species. It is because they are able to grow faster even after small hill fire. They allow faster regeneration of forest.

3. How can the planting of trees help reduce climate change?

Trees absorb carbon dioxide through photosynthesis. The increase in tree cover helps absorb carbon dioxide.



4. Apart from planting of trees, what else can we do to help reduce climate change at this site? Suggest at least two methods.

i. Protect the trees.

ii. Reduce the use of paper which helps curb deforestation.

or any reasonable answers.

#### Stop 4 The Home Farm

At Lo So Shing Village, observe the activity held outside the village houses

1. What activity is carried out outside the village houses? Farming.

2. Can you find a large piece of farmland? No.

3. What agricultural produce is grown from the farm?

Vegetables.

4. Do you think that the produce is for self-consumption only? Give reason to support your answer.

Yes, it is because the size of farmland and the output are small.

or any reasonable answers.

5. How can the growing of our own food help reduce carbon emission in Hong Kong?

Save fuel for transportation, production or packaging. As there are less fossil fuels being burned, carbon emission is reduced.

PLAN



6. Could you grow your own food at home? Why or why not?

No, there is only limited space.

7. What else can we do for food supply to reduce climate change?

- Eat locally-produced food
- Choose a diet with more vegetable and less meat.

### Stop 5 Mudflat

1. What are the characteristics of mudflat?

(a) What is its relief? Flat, low-lying land.

(b) What is made up of the mudflat? Sand and mud.

(c) Does the depth of water vary from time to time? Yes.

2. What kinds of living organisms live in the mudflat?

	Examples
Plants	<u>Mangrove</u>
Wetland Animals	<u>Fiddler Crabs, Mudskippers, Little egret, shellfish</u>

3. What does Mudflat provide for these living organisms?

Habitat.

4. Do all the animals live in the water all the time? No.

5. How will climate change affect the water level in the mudflat?

Melting of sea ice causes water level in the mudflat to rise.

6. How will the change in the water level affect the living organisms?

The living organisms will be under water all the time. Some cannot find their food and may die, causing extinction of some species.

7. What should you do to protect these living organisms in our daily life?

- Use less paper.
- Save energy.
- Consume locally produced products.

or any reasonable answers.

PLAN

