



## Conservation and Development- Tung Chung

Name: \_\_\_\_\_ Group: \_\_\_\_\_ Date: \_\_\_\_\_

### Background:

Planning Department has commenced the stage 2 public engagement on the Tung Chung New Town Extension Study. The new plan for developing Tung Chung includes two areas i.e. Tung Chung East and Tung Chung West. Tung Chung East tentatively has 120 hectares of reclamation and the two themes of land use are proposed i.e. Livable Town or Economic Vibrancy. Tung Chung West has 14 hectares of reclamation only due to the high ecological value of Tung Chung Bay. The theme of land use is development and conservation - A balance.

Tung Chung now has about 78 thousands residents, more than half are living at public houses where Yat Tung Estate is the largest one. A huge demand for land is required to build residential apartments and other community facilities in order to fulfill the target population of 220 thousands. However, the reclamation at Tung Chung Bay is controversial due to the high ecological valued mangrove and mudflat wetland and the heritage value of Ma Wan Chung village. Farmland and the village areas along Tung Chung stream will be acquired for the development. This river once being damaged from illegal excavation, and being restored back to its original state. Would this high ecological stream will be channelized in the proposed development? You are invited to participated in the planning of the Tung Chung New Town.

### Aims:

After the course, students should be able to:

1. Acknowledge the major development and its related process,
2. Briefly describe the updated proposed plan of Tung Chung,
3. Understand the updated situation of Tung Chung stream and its ecological value,
4. Experience the livelihood of Yat Tung Estate and Ma Wan Chung village,
5. Express their views about the sustainable development and the balance between conservation and development,
6. Do observation and record the appropriate data,
7. Analyze and organize data for presentation,
8. Cooperate with others and work together in a scientific investigation.

### Schedule:

9:00 - 10:00	Briefing
10:40 - 13:00	Field work
13:00 - 14:00	Lunch
14:30 - 15:15	Data analysis & Prepare presentation
15:15 - 16:30	Presentation & summary

### Equipment and tools:

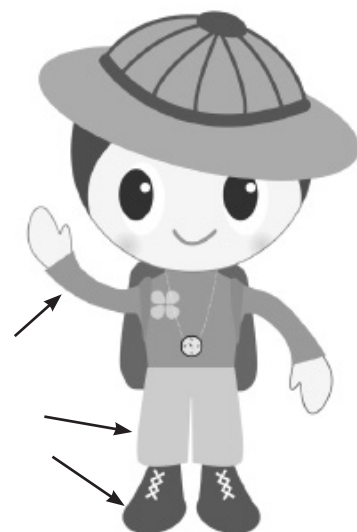
1	Clipboard (x1)	
2	Colour pencils (x1)	
3	Binoculars (x1)	
4	Macro-scope (x1)	
5	Compass (x1)	

### Clothing:

1. Long-sleeved shirt and trousers for better protection against mosquito and insect bites, as well as preventing sunburn. Shorts are not recommended.
2. A pair of shoes for preventing injuries. Slippers and sandals are not recommended.

### Safety:

1. Do wade into the water either the stream or the coastal waters, no water sports etc.





## A. Field site

Starting from Shek Mun Kap, walking along footpath heading north until reaching the Tung Chung stream mouth. Passing the channelized Wong Lung Hang estuary, and walking along the footpath to Ma Wan Chung village. You may visit the Yat Tung Estate. Attached a map for references.

## B. Habitat Assessment

### 1. Habitat mapping

Throughout the visit, record the habitat types, mark on the map with colour pencils and show their boundaries. Here are the habitat types you may encounter:

- a. Village -- three storey or lower height village houses, with or without occupants.
- b. Brown field -- the disturbed land e.g. storage area, car park or garbage filled land.
- c. Agricultural land -- the planted crops are growing and signs of agricultural activities seen.
- d. Abandoned agricultural land -- the land left for more than a year, no agricultural activities.
- e. Orchard -- land with fruit trees such as Lungan, Lichyee.
- f. Freshwater stream -- natural stream channel not affected by seawater, with visible water flow.
- g. Channelized stream -- being modified e.g. covered with concrete or unnatural materials at stream bank.
- h. Mudflat wetland -- the estuary environment with muddy or even pebbles substratum.
- i. Mangrove -- Plant community growth in between the sea and land, sometimes submerged in seawater.

### 2. Evaluating a habitat

According to the Environmental Impact Assessment Ordinance-Technical Memorandum, there are different criteria in evaluating a habitat: naturalness, size, diversity, rarity, re-creatability, fragmentation, ecological linkage, potential value, nursery/breeding ground, age, abundance/ richness of wildlife. In this field trip, we will focus on the following:

- a. Naturalness -- the less modified habitat, the higher value will be rated.
- b. Size -- the larger area of habitat, more valuable than smaller ones, all else being equal.
- c. Diversity -- more diverse species and communities, higher its conservation value.
- d. Re-creatability -- difficult to be re-created naturally or artificially are usually valued higher.
- e. Ecological linkage -- close proximity and/or links functionally to a highly valued habitat, the value increases.
- f. Abundance/ Richness of wildlife -- in general sites supporting more wildlife will be rated higher.

Please tick the check box and add the appropriate description. Finally, evaluating a habitat of its overall value.

## C. Current community situation

Yat Tung Estate and Ma Wan Chung village is close by, but the two living communities are different. Yat Tung Estate built since early 2000 while Ma Wan Chung village is over century. Try to visit these two places and compare the living condition, population density, community facilities and the commercial activities etc.

## D. Proposed planning and ideal future

Referring to the public engagement digest of Tung Chung New Town Extension Study, please comment on the present land use. You may use your group's creativity to design a brand new sustainable town for Tung Chung. You may show your idea on the current base map or using other means such as drawing or web-based map.

In addition, you may talk to the residents there to learn what they needed. You may help them to reflect their needs to the government or planning consultant, highlights the role of stakeholder.

Finally, as the wildlife cannot voice out, you may help them to figure out the future plan can accommodate the survival spaces for these animals and plants. Try to find out a balance between human and wildlife, but this time from the ecological point of view.



## A. Field site

### B. 1. Habitat mapping





## 2. Evaluating a habitat

Criteria	Village	Brown field	Agricultural/ Abandoned land	Orchard
Naturalness	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Size				
Diversity	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Re-creatability	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Ecological linkage	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Abundance/ richness of wildlife	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Overall				

Criteria	Freshwater stream	Channelised stream	Mudflat wetland	Mangrove
Naturalness	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Size				
Diversity	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Re-creatability	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Ecological linkage	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Abundance/ richness of wildlife	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>
Overall				

