Tung Chung Urban Development

Enquiry Skills Approach, Version 2.0

A. Planning and Preparation

Objectives

1. Identify the land use distribution in different areas of Tung Chung.
2. Compare the living conditions of different settlement areas in Tung Chung.
3. Study the impacts of Tung Chung urban expansion on nearby areas.
4. Study the importance of the concept of sustainable development in new town development.

Scope of the Study
1. Ma Wan Chung in Tung Chung
2. Yau Tung Estate in Tung Chung
3. Tung Chung Town Centre
4. Man Tung Road in Tung Chung

Field Work Plan

Field Work 1
1. According to the maps, take a walk in Ma Wan Chung Village, Yat Tung Estate and Tung Chung Town Centre.
2. Identify and record the land uses on maps 1.2 and 1.3.
3. Observe the surrounding environment and record all the data on Table 1.
4. Measure the noise level, dust particulates, wind direction, wind speed and pedestrian flow at the specific checkpoints.

Field Work 2
1. According to the route on map 1.1, observe the uses of ground floor space, including their number and characteristics, and record the data on Table 2.

Think About
List the safety risks when conducting urban fieldwork.

B. Data Collection

Data Items
1. Living Environment (including building density, building height, building appearance, etc.)
2. Local Economy (including land rent, types and number of economic activities, order of goods, etc.)
3. Transport (including types of transport, accessibility of public transport, etc.)
4. Social Environment (including characteristics of local residents, number of social facilities, etc.)
5. Environmental Quality (including dust particulates, noise level, etc.)

Think About

List the possible errors when collecting data:

Suggest ways to reduce the above errors.

Data Collection Method
1. Systematic Sampling

Equipment List

Items	Quantity	Checked	Returned
1. Base map (Individual)	x4	❏	❏
2. Clipboard (Individual)	x1	❏	❏
3. Compass (Individual)	x1	❏	❏
4. Counter	x1	❏	❏
5. Sound meter	x1	❏	❏
6. Anemometer	x1	❏	❏
7. Dust Particulates meter	x1	❏	❏

Data Recording Sheet

Table 1

Items	Ma Wan Chung Village	Yat Tung Estate	Tung Chung Town Centre
A. Living Environment			
1. Building Density	High / Proper / Low	High / Proper / Low	High / Proper / Low

2. Building
   a) Average Height
 	
   b) Building Age
	—————
	
	Higher / Lower
		—————
		
		Higher / Lower
			—————
			
			Higher / Lower

3. Living Environment Examples: surrounding environemnt, greening, management, scenery………	Good/ Satisfactory/ Poor Examples:	Good/ Satisfactory/ Poor Examples:	Good/ Satisfactory/ Poor Examples:
4.Types of Residential Buildings Examples: detached houses, bungalows, traditional houses, multi-storey buildings...	High/ Middle/ Low income Examples:	High/ Middle/ Low income Examples:	High/ Middle/ Low income Examples:
B. Local Economy			
5. Land Rent	High/ Middle/ Low	High/ Middle/ Low	High/ Middle/ Low
6. Types and Number of Economic Activities	More / Less	More / Less	More / Less
7. Order of Goods and Services	High/ Middle/ Low	High/ Middle/ Low	High/ Middle/ Low
8. Major Type of Customers	Local residents/ Local and overseas tourists	Local residents/ Local and overseas tourists	Local residents/ Local and overseas tourists

Table 1 (cont'd)

Items	Ma Wan Chung Village	Yat Tung Estate	Tung Chung Town Centre
C. Transport			
9. a) Types and Number b) Accessibility of Public Transport c) Cross-district Transport cost	More/ Less/ None High/ Average/ Low	More/ Less/ None High/ Average/ Low _____	More/ Less/ None High/ Average/ Low _____
D. Social Environment			
10. Local residents a) Income Group b) Age Group	High / Middle / Low Children/ Adult/ the elderly	High / Middle / Low Children/ Adult/ the elderly	High / Middle / Low Children/ Adult/ the elderly
11. Social facilities a) Number b) Accessibility	More/ Less Examples: Higher/ Lower	More/ Less Examples: Higher/ Lower	More/ Less Examples: Higher/ Lower
12. Public Open Space	Large/ Some/ Small	Large/ Some/ Small	Large/ Some/ Small

13. Pedestrian Flow (measure 1 minute)	a) Residents	b) Tourists	a) Residents	b) Tourists	a) Residents	b) Tourists

Table 1 (cont'd)

Items	Ma Wan Chung Village			Yat Tung Estate			Tung Chung Town Centre		
E. Environmental Quality and Others									
14. Greening Area	Large/ Some / Small			Large/ Some / Small			Large/ Some / Small		
15. Noise level (dB) (measure 1 minute)	1)	2)	3)	1)		2)	1)		2)
	4)	5)	6)	3)	4)	5)	3)	4)	5)
16. Dust Particulates (µg/ m³) (measure 1 minute)	1)	2)	3)	1)		2)	1)		2)
	4)	5)	6)	3)	4)	5)	3)	4)	5)
17. Wind Direction (measure 1 minute)	1)	2)	3)	1)		2)	1)		2)
	4)	5)	6)	3)	4)	5)	3)	4)	5)
18. Wind Speed (m/s) (measure 1 minute)	1)	2)	3)	1)		2)	1)		2)
	4)	5)	6)	3)	4)	5)	3)	4)	5)
19. Level of Urban Planning									

Table 2

Uses of Ground Level Space in Ma Wan Chung Village				
	Residential	Commercial	Vacant	Others
Characteristics				
Number				
Percentage (%)				

C. Data Processing, Presentation and Analysis

1. Draw appropriate graphs to represent the collected data.

Think About
List the merits and demerits of the chosen diagrams.

D. Interpretation and conclusion

1. What are the differences between Tung Chung Town Centre and Yat Tung Estate in terms of
(a) building density, (b) economic activities and order, (c) urban function and (d) land uses?

	(a) Building Density	(b) Economic Activities and Order	(c) Urban Function	(d) Land Uses
Tung Chung Town Centre				
Yat Tung Estate				

2. Describe the characterstics of Ma Wan Chung Village. How has Tung Chung urban development affected Ma Wan Chung Village?

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E. Evaluation

1. Other than the data collected in this course, suggest other data and information you might need to further investigate the urban development in Tung Chung. Explain your answer.

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