

#### **Ho Koon Nature Education cum Astronomical Centre**

Diploma of Secondary Education Geography Field Studies Course



# **Changes of Rural Village**

**Enquiry Skills Approach Version 2.0** 

## A. Planning and Preparation

#### Module

- 1. Building a Sustainable City
- 2. Combating Famine

## **Enquiry Question**

Hypothesis 1: The higher the accessibility, the less the agricultural land use.

Hypothesis 2: Abandoned land decreases with decreasing distance from the main road.

Hypothesis 3: Environmental pollution increases with decreasing distance from the main road.

## **Key Concepts**

Rural area	Urban encroachment	Urban sprawl	Land use change
Land speculation	Arable farming	Livestock rearing	Environmental pollution

### Scope of the Study

Tai Kong Po Village in Kam Tin

#### Time of the Study

Date:	Weather condition:

#### **Think About**

List the safety risks when conducting the fieldwork in rural area.

#### **Field Work Plan**

- 1. With reference to the map 4.1, walk along the assigned route in Tai Kong Po.
- 2. Identify the land uses located at both sides of the route. Land use types are suggested as
  - a) Arable farming
- b) Livestock rearing
- c) Abandoned land
- d) Residential land use

- e) Industrial land use and storage
- f) Other land uses
- 3. Record and color the land uses on the map 4.1.
- 4. Measure the highest values of noise level and air quality for one minute at checkpoints, and scale the water quality. Record the results at Table 1.
- 5. Count the abandoned sites and record the results at Table 2.

#### **B.** Data Collection

Primary Data Items		Exam pothe		Data C	ollection M	ethod	Equipment required
Timary Bata items	1	2	3	Observation	Counting	Measuring	(Number on the Equipment Checklist)
1. Land uses							
2. Abandoned land							
3. Noise level							
4. Dust particulates							
5. Water smell							
6. Water turbidity							

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1	LIST	other	methods	to.	examine	water	dilality

2.	List	the	merit	s and	l demer	its o	f countii	ng wi	nen co	ollect	ing 1	the	numl	ber o	t a	banc	loned	land	t.

#### **Sampling Method**

Stratified Systematic Sampling

# **Equipment Checklist**

Items	Quantity	Checked	Returned
1. Base map (Individual)	x1	٦	
2. Clipboard (Individual)	x1	ū	
3. Compass (Individual)	x1		
4. Colour pencils	x1		
5. Sound meter	x1		
6. Dust particulates meter	x1		

# **Data Recording sheet**

Route: A / B

Table 1 - Environmental Quality of Tai Kong Po

Distanc	e from the starting point (m)	210 (1)	420 (2)	630 (3)	840 (4)	1050 (5)	1260 (6)	1470 (7)
Measurem	ents with Equipments							
Noise Level	1. Noise Level (dB)							
Air Quality	2. Dust Particulates (μg/m³)							
Scale Value	es (Mark NA if no river found ne	arby)						
	3. Smell							
	None Strong							
Water	1 2 3 4 5							
Quality	4. Turbidity							
	None High							
	1 2 3 4 5							

## Table 2 -Tally of abandoned land

Distance from the	0 - 210	210 - 420	420 - 630	630 - 840	840 - 1050	1050 - 1260	1260 - 1470	
starting point (m)	(0) - (1)	(1) - (2)	(2) - (3)	(3) - (4)	(4) - (5)	(5) - (6)	(6) - (7)	
Tally of abandoned land	Tally of abandoned land (e.g. +++++++++++++++++++++++++++++++++++							
1. Abandoned Farmland								
2. Abandoned Pigsties/ Chicken Sheds								
3. Abandoned House								
4. Others								
Total								

#### **Table 3 - Aerial Photo**

Secondary	Aerial Photos in Tai Kong Po							
Data Items	Year:	Year:						
1. Agricultural land use								
2. Residential land use								
3. Others								

# C. Data Processing, Presentation and Analysis

1. List the distance percentages of the land uses along the route in descending order.

Route: A 1. Land use:	(	%)	Route: B 1. Land use:	(	%)
2. Land use:		%)			%)
3. Land use:					%)
4. Land use:			4. Land use:		%)
5. Land use:					%)
6. Land use:			6. Land use:		<del>%</del> )
2. Draw the most appropriate				,	
Think About List the merits and demerits	of using the ch	osen dia	grams.		
1. (a) Does the fieldwork resu agricultural land us			sion with the primary data		
(b) With the collected data	9 ,	scribe ar	d explain the distribution c	of the arable farmin	g and
` '	9 ,	scribe ar	d explain the distribution o	of the arable farmin	g and
` '	9 ,	scribe ar	d explain the distribution c	of the arable farmin	g and
` '	9 ,	scribe ar	d explain the distribution o	of the arable farmin	g and

2. Does the fieldwork result support the hypothesis 2 Abandoned land decreases with decreasing distance from the city center? Support your conclusion with the collected data and graphs.
3. Does the fieldwork result support the hypothesis 3 <i>Environmental pollution increases with decreasing distance from the city center</i> ? Support your conclusion with the collected data and graphs.
<ul><li>E. Evaluation</li><li>1. Other than the data collected in this course, suggest other enquiry question, data and information you might need for a fieldwork in the field site. Explain your answer.</li></ul>