Comments on the Concept Plan for Lantau

We suggest NOT to reclaim the Tung Chung Bay.

Reasons for objection to the proposed reclamation

Referring to the Concept plan for Lantau, the Planning Department (PD) planned to develop Tung Chung into a town with 220 000 population. And to reclaim the Tung Chung Bay.

We are a group of Tung Chung residents, we have lived here for many years after years of observations and practical experience, we realize that Tung Chung should not be over-developed into a town with a population of 220 000. And the Tung Chung Bay should not be reclaimed.

The reasons that the Tung Chung Bay should not be reclaimed are many, and are listed below.

(1) Tung Chung Bay is the natural home for many plants, molluscs, arthropods, birds, animals, fishes, insects and reptiles etc.

The Tung Chung Bay has an area of mangroves. The mangrove trees can absorb the humus and mineral substances from the mudflat and through photosynthesis these are turned into nutrition substances. These nutrition substances provide food for molluscs, arthropods, fishes, birds, animals etc. The food chain is very clear. We have seen many species of birds, like eagles, egrets, grey egrets, kingfishers, and many others (some birds are black in colour, with the size like egrets, they live in groups; some are very tiny—smaller than sparrows, with two special "horns" on their head, they live in pairs; we do not know the names.).

The mangroves also provide a place for fish nurseries. In the water there are many kinds of fishes. Groups of small fish are seen; sometimes-big fish splashes over the water. There are also skates, jellyfish and even dolphins.

In the coastal area or beach, there are clams, mussels, shrimps, green crabs, red crabs, horseshoe crabs, frogs, and mudskippers etc....

There are many species of butterfly and dragonfly.

Not for away from Tung Chung Bay is San Tau where there is also a mangrove stand and seagrass beds. The seagrass beds and nearby mangroves at San Tau (SSS1 No.58) are one of the only three sites where the seagrass *Zostera japonica*, and one of the only two sites where the seagrass *Halophila ovata* are recorded in Hong Kong. Both species are rare and very valuable in Hong Kong.

A recent Hong Kong-wide mangrove study completed for the Agriculture and Fisheries Department mapped and characterized the 43 remaining mangrove stands in Hong Kong. The mangrove stand in San Tau is classed as very important for conservation. Their existence is threatened by water quality degradation due to development. This seagrass community is obviously under stress and remains at risk from sedimentation due to reclamation. The construction of the new airport had led to serious sedimentation that nearly destroyed the bed. The Government has acknowledged the seriousness of this threat by declaring an SSS1. Since Tung Chung Bay is very near to San Tau, the reclamation in Tung Chung Bay will no doubt seriously affect the chances of the seagrass beds and mangrove stand in San Tau to survive. The reclamation in Tung Chung Bay will destroy the ecosystem and habitat near by (including Tung Chung Bay and San Tau) and affect the hydrology of the area and increase currents and erosion.

(2) Tung Chung Bay and the Tung Chung Stream

The Tung Chung Stream is one of the streams that is the richest in freshwater fish species, 23 fish species were found. (The Tai Ho stream has 47 species, the combined total is 57). This represents fully half of the total Hong Kong freshwater fish fauna.

Tung Chung stream is the only known Hong Kong site for *Acrossocheilus* (*Lissolichthys*) wenchowensis beijiangensis (Dudgeon 1993). The Tung Chung Stream is also one of the only two sites on Lantau where the locally rare Crested Kingfisher *Ceryle lugubris* has been recorded. (Remarks: Kingfisher was also seen at the Tung Chung Bay.)

Unfortunately, the Tung Chung Stream is partly turned into culverts. Culverting the Stream will destroy its value and be an irrecoverable blow to Hong Kong's freshwater biodiversity.

The reclamation in Tung Chung Bay will has bad effects to the inhabitants in the Stream.

(3) Historic Heritage

Around the Tung Chung Bay there are some historic heritages. These should be retained, as a cable car system will be built in Tung Chung to boost the HK tourist industry. These historic heritages should be **renovated** to become attractive tourist points. So that people coming to Tung Chung not only can enjoy seating in the cable car but also going around to see some special historic heritages. The reclamation in Tung Chung Bay will damage these precious historic heritages. Examples are:

The Tung Chung battery: this was built in the early 19th century. This battery together with the Tung Chung Fort (1000 metres to the south), were built to strengthen the control over the Lantau Channel. Many foreign ships passed by this channel while sailing towards Guangzhou. But there were bandits around where the situation was out of control. To remedy this, in 1817 the Viceroy of Guangdong and Guangxi decided to erect the Tung Chung Battery. This battery was gazetted as a monument on 11 November 1983 and is protected under the Antiquities and Monuments Ordinance.

Now at this battery we can still see the Tung Chung Bay and have some feelings of the function of it in the 19th century. If the Bay is reclaimed, we will see only a "concrete forest" the Battery will lose its value as an attractive tourist point.

The Tang Dynasty limekiln: There was a Tang Dynasty limekiln at Fu Tei Wan. Due to the construction of the New Airport at Chek Lap Kok, the kiln has been moved to Tung Chung and supposed to be located near the Battery.

The Hau Wong temple: this was built in the Song Dynasty (1279?). Hau Wong was a minister of the late Song Dynasty called Yueng Leong Jit, he came to Hong Kong with the Emperor

He was the Administer of Lantau, the people of Lantau loved and supported him. After his death the people in Lantau built a temple in memory of him.

The Hau Wong birth festival: The birthday of Hau Wong is on the 18 August (Lunar calendar). Every year nearer to the lunar calendar of Mid-Autumn (15, August), there is a memorial activity in front of the Hau Wong Temple.

The Temple is facing the Tung Chung Bay, near by are the mangrove trees and its inhabitants. These together will be an attractive tourist point. Of course still need some renovation.

If the Hau Wong temple is surrounded by high-rise buildings, it will also lose its value as an attractive tourist point.

(4) Sunset and moonlight at Tung Chung Bay

Tung Chung Bay is a good place to see the sunset. It has beautiful sunset scenery. Many people come here to take photographs. In fact, in other times of the day Tung Chung Bay also shows its special feature; in particular, under the moonlight. The moonlit scene is enchanting.

No matter it is a fine day or a cloudy day; the scenery of Tung Chung Bay is unique.

These beautiful sceneries attract local people and overseas tourists to come to Tung Chung, and to see the natural beauty.

(5) Tung Chung Bay and the Cable Car System

The Cable Car system in Tung Chung will be opened soon. This Cable Car system is another new and special tourist attraction. Local people and overseas tourist will have a chance to view the beautiful and green natural scenery of Hong Kong. However, if Tung Chung Bay is reclaimed and tens of high rise buildings are erected there, the local people and overseas tourist will see another "concrete forest" instead of natural green and the beautiful Bay.

In other countries the Cable Car system is so designed that it allows tourists to view beautiful sceneries hence get an unforgettable impression.

Some examples are as follows:

Country	View from the Cable Car system
Singapore	The strait of Singapore and the Sentosa Island
Fort William (Scotland)	A range of green mountains, some are covered
	with snow even in the summer
Bergen (Norway)	A big bay with the ocean as a background
Cairns (North Queensland)	A huge green rain-forest.

It is obvious that Tung Chung Bay should not be reclaimed in order that the tourists can enjoy its beautiful scenery from the cable car.

(6) Air quality in Tung Chung and Tung Chung Bay

We have lived in Tung Chung for many years, we like the place because it is nearer to nature. However, we are rather confused when we find that the air quality in Tung Chung becomes poorer and poorer in the recent years. Data recorded are shown below.

Year	Highest Air Pollution Index
1999	113
2000	130+
2001	165.
2002	185
2003	163
2004	201 (severe)

Beyond our expectation, on 28th August 2002 the government environment watchdogs recorded **an API reading of 181 at Tung Chung**. In contrast to Tung

Chung, readings in other stations across the territory were all below 100. Even worse, the API at Tung Chung on 9th September 2002 was 185! This reading is the highest since the Environmental Protection Department began air quality monitoring in 1995.

Another recorded high is on 14 September 2004, API=201! (SEVERE)

Another set of data: the number of days/times with API higher than 100 in the recent four years.

Year	Days/times with API higher than 100
2001	10
2002	15
2003	22
2004	40

Up to 15th September 2004, the EPD had recorded ten highest API; five were recorded in Tung Chung.

Date	Venue	API
14/09/04	Tung Chung	201
09/06/04	Tung Chung	197
09/09/02	Tung Chung	185
03/11/03	Mong Kok	182
28/08/02	Tung Chung	181
03/11/03	Yuen Long	175
29/03/00	Central	174
10/07/02	Tung Chung	170
03/11/03	Shum Shui Po	170
03/11/03	Tsuen Wan	169

All the above data indicate that the air quality in Tung Chung went from bad to worse in the recent years.

The number of smoky days is also becoming more and more according to our observations. When hiking to the top of the nearby hills, one could see that the sky was blue overhead but looking back to Tung Chung the whole of Tung Chung was covered by grey/yellow mist. This indicated that Tung Chung was surrounded by suspended particulate and other pollutants.

In the high API days, those who stayed in Tung Chung got serious headache and eye irritation. Expert warnings say any reading over 100 means pollution is so bad people with respiratory problems should stay indoors. A reading of 180 places even healthy people in immediate danger and exposes them to possible long-term respiratory damage.

In addition, from time to time, the air in Tung Chung had "burnt" smell, tar smell and sour smell

A lot of people need to work outdoors, like the workers handling cargo at the airport and airplane technicians and engineers checking the planes when they have landed, postmen, gardeners, street cleaners etc.

There were a lot of discussions concerning the reasons of the poor air quality in Tung Chung, and is summarized as follows.

Tung Chung is in the east of Hong Kong and south of the Pearl River Delta. When there is weak east wind or weak north wind the pollutants from Hong Kong city center and the pollutants from the factories located in the Pearl River Delta will be blown to Tung Chung. And Tung Chung is surrounded by hills, so the pollutants cannot disperse and are trapped there. In addition, Tung Chung is very near to the airport; it is said that the pollutants emitted from an airplane during its take off is equivalent to the pollutants emitted from tens of buses.

It is obvious that due to its unique geography, Tung Chung is not feasible to be developed into a high population (220 000) new town. In particular, Tung Chung Bay should not be reclaimed so as to serve as "lungs" of Tung Chung. If tens of high-rise buildings are to be erected there the air circulation problems in Tung Chung will become even worse; Tung Chung will become a place that is not suitable for residence.

The green groups also expressed their opinions.

For example, when talking about the high air pollution index in Tung Chung, the chief executive officer of local environmental group Green Power, told the reporter of South China Morning Post that the latest news had left him frustrated. "There is no doubt that the air quality is getting worse there. But it is also wrong for the government to build a new town in Tung Chung for the benefit of its airport development. Tung Chung, located at the foot of a mountain and facing the sea, would have air pollutants trapped during gentle sea breeze conditions." he said. (Sunday Morning Post, September 8, 2002). He had expressed the same view in writing to some other Chinese newspapers.

We consider that the PD should review its plan based on the data recorded in the recent years and the ecology in Tung Chung. We suggest that the reclamation in Tung Chung Bay be deleted to preserve the ecological environment and to provide an open space for better air circulation.

(7) The HK-Z-M bridge

If the bridge is to be built, it is estimated that there will be 15 000 to 20 000 (some sources said could be 80 000!) vehicles passing daily. The emission of pollutants from these vehicles will further deteriorate the air quality in Tung Chung.

Alternatives to the Current Plan

The main reason for the Government to develop Tung Chung into a high population new town is that they have built the MTR Tung Chung line; a high population new town will provide sufficient passengers. We have stated that Tung Chung is not feasible to be developed into a high population (220 000) new town, especially if the major part of the new town is to be built in the reclamation area of the Tung Chung Bay.

The airport projects have already destroyed around 25% of Lantau's coastline, including parts of the ecologically valuable Tung Chung Bay. The remaining areas of natural Tung Chung Bay coastline has become much more valuable.

Instead of the reclamation in Tung Chung Bay to erect tens of high rise buildings there, we suggest to develop Tung Chung and Tung Chung Bay into a tourist attraction.

(1) The Disney Land and Cable Car System will be a tourist attraction

- The Cable Car System in Tung Chung is planned to start operation in 2005/2006. It is estimated that up to the year of 2006 there will be around 1.9 million visitors using the Car System to visit Ngon Ping, and will be increased gradually to 2.6 or 3.5 million in the year of 2016. Part of these visitors will use the MTR Tung Chung line.
- The Disney Land will be opened in September 2005; visitors are estimated to be around 3.4 million. After enjoying the Disney some of the visitors may come to Tung Chung to use the Cable Car or to tour elsewhere, again part of these visitors will use the MTR Tung Chung line.

These will provide sufficient passengers for the Tung Chung line.

(2) Ecological tour and hiking:

Tung Chung can serve as a starting point for hiking. For example: starting from the Bay, tourists can go to San Tau, along the natural coastline they can see the valuable mangrove stand, rare seagrass beds, other interesting plants, as well as crabs, frogs, mudskippers, fish, birds, butterflies, dragonflies and many other living beings. And further, the tourists can go to Sha Lo Wan and Tai O.

From the Tung Chung Bay travelers may go to Ngong Ping (Po Lin Monastery and Great Buddha Statue)

(3) Tung Chung Bay Natural Coastline Park and the Tung Chung Stream:

Tung Chung Bay can serve as a natural coastline park; this park will keep the natural coastline. Of course still need some renovation. The Bay is linked with the Tung Chung Stream. The Stream will also be kept to its natural feature.

At the moment, in weekends a lot of people come here to enjoy the natural environment and the scenic and to observe the ecosystem around the area. After the completion of the Cable Car Project much more people will come.

(4) Ecological Museum:

We suggest to establish an Ecological Museum. The Ecology Museum will display photographs and materials concerning the ecosystem in Lantau. This will serve as an educational center for people to know, to love and to protect our environment.

(5) Historic heritages and monument tour:

The Hau Wong Temple, the Tung Chung battery, Tung Chung Fort, The Tang Dynasty limekiln are historic heritages that should be renovated to become attractive tourist points. Tung Chung Bay can also be a starting point for monument tours. Besides the monuments in Tung Chung Bay there are other historic heritages nearby. Some visitors may like to study historic heritages and culture. Monument tours can also be combined with ecological tours.

- **(6) Fishing and angling:** Tung Chung Bay is an ideal place for fishing and has attracted many fishing enthusiasts.
- (7) **Boat paddling:** The Bay is very calm and is good for boat paddling. (We do not recommend motorboats, because too many motorboats will disturb the ecosystem)
- (8) Camping: Tung Chung Bay is an idyllic place for camping. There is an existing

camping site near the Hau Wong Temple. Young people and students are encouraged to use this site. We suggest to develop a few more camping sites.

Other suggestions

Can we survive if Lantau be developed into an entirely leisure and entertainment island. (Like the Sentosa Island in Singapore or the Victoria Island in Vancouver). In other words without the HK-Z-M bridge and the logistics park.

The answer is Yes.

In such a case, we can develop some other leisure and entertainment facilities.

For example:

Sub-tropical botanical gardens

Chinese herb gardens

Aero-museum (not the same as the Skycity)

Skyscraping Wheel park (Eye of Lantau)

Lantau shoreline boat tour

Lantau helicoper tour

It was reported that the tourists normally stayed in HK for two nights and three days. If the Lantau Island is designed as an entirely leisure island, the tourists can stay in Lantau for at least one night and two days. This will prolong their stay in HK.

The Development of Tung Chung

Tung Chung is surrounded by high hills, not suitable be developed to a population of 200 000.

The development of Tung Chung should consider seriously the topography there.

At a first sight one may think that Tung Chung does not have a lot of high-rise buildings. But after staying there for several years we realized that those high hills surrounding Tung Chung are higher than all the high-rise buildings in Central, and there are no spaces between them. In other words Tung Chung actually has a lot of "high rise buildings-these hills". This is the reason why the air pollution in Tung Chung is so serious. These hills do not allow the pollutants to disperse, no matter the pollutants is from the city center when there is weak East wind or from the Pearl River Delta when there is weak North wind.

The high air pollution index data as well as the feelings and experience of the Tung Chung residents indicate this. From time to time, there is "burnt" smell, tar smell and even sour smell in the air! When the API is high the residents got headages, coughs, throat problems, eye pains etc.

The following API data give us a warning, the air quality will be worsen to what extend?

The first set of data indicate the highest API recorded in Tung Chung in the recent years: (sources: Environmental Protection Department)

Year	highest API
1999	113
2000	130+
2001	165
2002	183
2003	163
2004	201 (SEVERE !)

Another set of data showing the days/times of API higher than 100 during the recent years:

Year:	Days/times with API higher than 100
2001	10
2002	15
2003	22
2004	40 (four times higher than 2001!)

In addition, up to 15 September 2004, 10 highest API were recorded by EPD and five

were recorded in Tung Chung.

Date	Place	API
14/09/04	Tung Chung	201
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10/07/02	Tung Chung	170
03/11/03	Sham Shui Po	170
03/11/03	Tsuen Wan	169

The Islands District Councilor Chau Chuen-heung conducted a survey regarding the air quality in Tung Chung; a sample of 247 was taken, 53.5% said they and their family members had illness due to the bad air. 41.5% considered that the air quality is bad, and 35.8% said the air quality is very bad. (Ming Pao NT West Edition, 8/Jan/2005)

Friends of the Earth did a findings as well. The survey polled 559 of Tung Chung's 60 000 residents on Feb 5, half living in public housing and the rest in private flats. About 63 % described the air quality as bad or very bad. (SCMP, 16/Feb/2005, Wen Wei Po and others)

To what extend is the pollution from the airport operation impacts Tung Chung? This also should be considered. It is said that the pollutants emitted from an airplane during its take off is equivalent to the pollutants emitted from tens of buses. Hiking teams found the airport operation would have bad influence to the air in Tung Chung and the nearby area. Under certain atmospheric conditions aviation fuel pollutants enter deep into the Wong Lung Hang Valley (a valley very near to Tung Chung). When walking down Wong Lung Hang Valley they could consistently smell aviation kerosene from a height of about 200 metres down to a height of about 100 metres in the valley. Another experience was: a hiking team ascending Wong Lung Hang could smell kerosene fuels all the way up to the Yi Tung Shan trail at a height of about 700 metres. In addition, smell of aircraft fuel was also found on a small hill in Tung Chung that overlooks the Airport Channel.

All the above data tell us the air quality in Tung Chung reached an unacceptable level. Due to the geography there, Tung Chung is not feasible to have a population of 200 000.

We must also consider the floating population; this will be very high due to the Disney,

the Cable Car System and some other facilities.

The Tung Chung Bay should not be reclaimed to allow better air circulation. Besides, there is a valuable eco-system there with the mangroves stands. (refer to another article)

The Logistics Park (LP) is proposed on the future reclamation near Siu Ho Wan. The reclamation area will be 112 hectare. This huge area of reclamation will pollute the sea, the streams, and the water quality. The marine inhabitants including the Chinese white dolphin will be seriously impacted. During the reclamation process, engineering vehicles and heavy trucks will produce air pollution as well as noise pollution. When the LP is built it is supposed to operate 7 days a week and 24 hours day. Again the air pollutants will be blown to Tung Chung. It is said that the LP will need high pole lighting facilities, what influences will these give to the nearby residents?

When building the HKZM bridge, the coastline near San Shek Wan will be destroyed; the huge area of reclamation will pollute the sea. The marine inhabitants including the Chinese white dolphin will be seriously impacted. When built, the Bridge will have very heavy traffic flow, and will also operate all the day round. This together with the LP will bring great harm to the air quality in Tung Chung. In addition there will be serious noise pollution.

In the city center the air pollution is serious in the daytime due to heavy traffic, however at night the traffic flow is greatly reduced. There still is a chance for the pollutants to disperse during the nighttime.

However, if the Bridge and the LP are built, Tung Chung will be disturbed by filthy air and noise day and night.

Tung Chung is already choking, she cannot bear further burden.

Environment secretary Sarah Liao Sau-tung said that the air quality in HK would not be improved in the coming two years. Then when will the air quality be improved? The HKSAR had announced that they had contacted Guangdong in 1999 to discuss air pollution control. Six years had passed and what is the result?

The Governments should not forget the Los Angeles air pollution disaster. In 1955 an air pollution disaster happened in LA, USA; several thousands of people were harmed and more than 400 died.

Lantau (including North Lantau) should be planned as an entirely travel, leisure and sports center.

The concept plan claimed that the planning vision is to promote sustainable development. What is sustainable development? Not only to consider ourselves but also our future generations.

We are now suffocating in Tung Chung, what will happen if huge amount of concrete pouring there with heavy traffic running day and night? This is for the good of our future generations? This is sustainable development?

Please leave the green Lantau for us and our future generations. The original beauty of Lantau will never restore once it is destroyed.

(March 2005)



To "Sarah Yuen" <sjyuen@legco.gov.hk>

cc "sychoy" <sychoy@pacific.net.hk>, "Emily Lau"
 <elau@hknet.com>

bco

Subject Concept Plan for Lantau

To: Ms Sarah Yuen (Legco Planning Lands and Works Panel)

Dear Ms Yuen,

Attached please find our proposals regarding the Concept Plan for Lantau. We would like to be presented at a meeting where the Lantau Concept Plan will be discussed and make our comments known to this Panel.

Thank you for your attention and best regards,

c.c. Ms Emily Lau, Ms SY Choy

Hoffman Lee Environmental Group Tung Chung Crescent Owners' Committee

E-mail:

Phone:

Lantau (TC development March-05) doc TCBAY(Feb-05) doc