

Proposal to set up a Geopark in Hong Kong

PURPOSE

This paper seeks members' advice on the proposal to set up a geopark in Hong Kong.

BACKGROUND

2. Most people have the impression that Hong Kong is a crowded concrete jungle with only tower blocks and shopping malls. Less people are aware of the fact that we also have sylvan environments of stunning natural beauty. In this small territory of 1,100 square kilometres, more than half of the land is wooded mountains and ravines. While much of Hong Kong's wild terrains boast high biodiversity, which has attracted growing attention in recent years, also harboured within our landscape are some extraordinary but lesser known geodiversity, such as multifarious rock formations and geographical features. In last year's Policy Address, as a part of the Government's continuous effort to enhance overall quality of life, the Chief Executive announced that the Government would set up its first geopark under the framework of the Country Parks Ordinance and Marine Parks Ordinance, with a view to better conserving our geological landscapes as well as promoting geoeducation and geoscience popularization.

3. The Geopark programme was initiated by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1999, and was launched in 2004. The definition of geopark is "geological site of special scientific significance, rarity or beauty; together with geological significance, these sites must also have high archaeological, ecological, historical or cultural value". At present there are 57 global geoparks worldwide, which are located in 18 countries, and 20 of these parks are in the Mainland.

4. Last year, we commissioned a study to assess the feasibility of establishing a geopark in Hong Kong. The study acknowledged that two regions, namely the northeastern New Territories and Sai Kung, are world class and unique and representative in terms of geodiversity, planning and management, ecology, science popularization potential and cultural interests. The study recommended setting up a geopark in Hong Kong covering these areas for better protection and integrated management of our geological attractions and promotion of geodiversity. The Government agrees with the findings of the study, and plans to include the northeastern New Territories and Sai Kung into the proposed geopark.

AREAS COVERED BY THE PROPOSED GEOPARK

5. According to the submission requirements for acquiring the national geopark status, a geopark must have rich geodiversity and sound management. To ensure that the proposed geopark could be best managed and protected, the Government will establish the proposed geopark under the existing legal framework for protected areas. The proposed Hong Kong Geopark will include two regions and eight areas (see Annex). A brief introduction of the areas concerned area as follows -

Northeast New Territories

This area comprises representative and diversified sedimentary rocks:

- (a) **Tung Ping Chau:** Lacustrine sedimentary rocks, the youngest rocks of Hong Kong (66 million years old).
- (b) **Tolo Channel, Lai Chi Chong, Ma Shi Chau and Bluff Head:** The oldest rocks of Hong Kong, formed in Devonian period 400 million years ago.
- (c) **Double Haven:** As sea water submerges the land, bays and islands here link together to form an inland sea environment.
- (d) **Port Island:** Conglomerate and sandstone formed in the Cretaceous Period, indicating the semi-desert climate at that time.

Sai Kung areas

This area mainly comprises of rare volcanic columns, including:

- (e) **High Island and Tai Long Wan:** High Island is full of hexagonal rock pillars along the coasts, while Tai Long Wan exhibits coastal landforms formed with volcanic rocks.
- (f) **Sharp Island:** There are a diversity of volcanic rocks including rhyolite, eutaxite, etc.
- (g) **Ninepin Group:** It abounds in abrasion landforms, and the hexagonal rock pillars here are 2 meters or more in diameter.
- (h) **Wang Chau, Basalt Island and Bluff Island :** It is full of closely arranged hexagonal volcanic rock pillars and Hong Kong's best sea arches along the coasts.

6. Most of the abovementioned areas fall within the boundary of the existing country or marine parks. As to areas that fall outside protected areas, the Government will designate them as special areas or marine parks under the Country Parks Ordinance or Marine Parks Ordinance for comprehensive protection.

PREPARATION WORK CONNECTED WITH THE NOMINATION

7. We are now actively preparing our submission, and hope to submit it to the Ministry of Land and Resources (MLR) for the proposed geopark to be listed as a national geopark by end 2009. The submission will include areas such as geology, ecology, cultural heritage, current status of conservation and management, and overall planning.

PUBLICITY, EDUCATION AND KNOWLEDGE BUILDING

8. To meet the requirements of becoming a national geopark, we have to enhance our publicity, knowledge building and education work in relation to geodiversity. This is because active public engagement is an essential element in acquiring the national geopark status. At present, not many people in Hong Kong are aware that we have a wealth of interesting rocks and terrains within close proximity to the urban districts. People in general also do not understand the value and significance of geopark. To help the public learn more about these geological treasures and appreciate the importance of preserving our geological resources, it is imperative to augment publicity and promotion in all respects.

9. To make geopark visits more informative and interesting, we will develop geo-walks and geopark visitor centres at suitable sites. We plan to establish one geo-walk for each of the eight geosites. The existing Country Hall of Lions Nature Education Centre (Tsiu Hang) will be redeveloped as a geopark visitor centre to present Hong Kong's geomorphologic history and rocks. Outside the gallery there will be a geo-walk to exhibit rocks and minerals found in Hong Kong. The Pak Tam Chung Country Park Visitor Centre will be redeveloped as another geopark visitor centre which highlights the world-class hexagonal acidic volcanic rock columns found in eastern part of Hong Kong.

10. We also plan to produce multi-lingual versions of the guidebooks which will be available at the geopark visitor centres and uploaded to the newly established Hong Kong Geopark website, in order for members of the public to learn more about geology and geomorphologic features.

11. Regarding educational work, we will enhance our promotion work for geoconservation, including a series of educational activities, such as geological games, geo-education packs, visits to primary and secondary schools, school-based teaching with demonstrations and games, geo-tours, training programmes for teachers on informative classroom activities and field-study techniques, and talks in public libraries and book stores. A theme song, together with an MTV, will be produced and publicised for the geopark. Furthermore, activities and education packs will be offered in different versions to suit different needs.

12. We will work together with the Civil Engineering and Development Department and relevant environmental groups to provide more educational materials

suitable for general use. The tertiary institutions will also be invited to carry out related research projects for the geopark proposal.

EXCHANGE AND STAFF TRAINING

13. To enhance our exchange with global geoparks, we shall send delegations to other geoparks in the Mainland designated by UNESCO, as well as other member states of the Global Network of National Geoparks (GNN), for the purposes of knowledge accumulation and experience sharing.

14. Training will be provided to AFCD personnel involved in this mission. Training subjects included theory, field studies and fundamental geological knowledge. Local geologists and experts from the Mainland as well as other GGN members will be invited to assist on staff training, with a view to improving the quality of management of Hong Kong's geopark.

CONSULTATION

15. The Government values the views from members of the public on the proposed geopark. In this connection, we have consulted the Country and Marine Parks Board (CMPB) and relevant environmental groups. They generally support the proposal and hope that the Government would submit the application to the Mainland as soon as possible, to list the proposed geopark as a national geopark. We are also consulting relevant District Councils and local organisations, so that we could take heed of their views on the proposal.

ADVICE SOUGHT

16. Members are invited to give views on the proposal of setting up a geopark in Hong Kong.

Environmental Protection Department
Agriculture, Fisheries and Conservation Department
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香港地質公園 Hong Kong Geopark



**新界東北地區
Northeast New Territories Region**

- 1 東平洲
Tung Ping Chau
- 2 印洲塘
Double Haven
- 3 赤門(黃竹角咀、荔枝莊及馬屎洲)
Tolo Channel (Bluff Head, Lai Chi Chong and Ma Shi Chau)
- 4 赤洲
Port Island

**西貢地區
Sai Kung Region**

- 5 擱船灣及大浪灣
High Island and Tai Long Wan
- 6 橋咀洲
Sharp Island
- 7 鑊缸群島(橫洲、火石洲及沙塘口山)
Ung Kong Group (Wang Chau, Basalt Island & Bluff Island)
- 8 果洲群島
Ninepin Group

▲ 地質公園遊客中心的選址
Sites for Geopark visitor centre

- 市區
Urban Areas
- 郊野公園
Country Parks
- 特別地區
Special Areas
- 海岸公園/海岸保護區
Marine Parks/Marine Reserve

