

**Conservation and Revitalisation Strategies for Historical and  
Ecological Heritages of Grass Island: A Case Study of a More  
Than 400 Years of History Island's Sustainability  
(Project No. EP86/27/24/11-23)**

**Mid-Term Conservation Management Plan**

**(6 - 10 years plan from 2031 to 2035)**

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## 1. Environmental Conservation

### Cattle Problems

In the mid-term report, it is expected that the number of cattle will gradually decrease between 2031 and 2035, as almost all the cattle in the Tap Mun have been sterilized. Since the lifespan of a cow is approximately 20 years, we believe that the number of cattle in the mid-term 6-10-year report will be less than the current 24, with a conservative estimate of about two-thirds, or 18, remaining.

Therefore, the impact of the cattle on the grassland will gradually decrease. However, according to the volunteers, the carrying capacity of the grassland in Tap Mun is barely sufficient for two adult cattle. Therefore, even though the number of cattle is gradually decreasing, the carrying capacity of the grassland will still be lower than what it can handle.

During the 6-10-year period, we still need to monitor the cattle's fertility rate to understand if any cattle are still not completely sterilized. We also need to communicate and coordinate with the volunteers to understand their feeding plans, as the current number of cattle still poses a threat to the grassland. We will, therefore, discuss the issue of the grassland's impact and propose recommendations in the next chapter.

However, currently the cattle bring another problem, their feces cause environmental pollution. The volunteers believe that the cattle's manure helps provide nutrients to the grassland. However, the grasslands in Tap Mun have already become dry, making it difficult for the grass to grow. The cattle's manure does not significantly help the grass grow, and the number of cattle is, in fact, greater than the carrying capacity of the grassland. Therefore, we believe that the cattle's manure needs to be dealt with

regularly, including establishing trash bin or composting facilities for the cattle's manure, and storing the manure in a specific location to avoid hygiene issues.

According to foreign research, if cow dung is not composted before use, it may produce bacteria, parasites, or lead to the growth of weeds. Therefore, we believe it is necessary to process the cow dung and compost it in long term. After that, we may apply the composted nutrients to the grassland, ensure the healthy growth of the grass and prevent weed growth. As currently no control of the cattle feces is being treated.

In the previous report we already indicated that the current area of grasslands on Tap Mun is insufficient to support all cattles in Tap Mun. Therefore, we recommend finding an alternative location to grow grass for the cattle to consume. This would be more effective than volunteers bringing in food from outside. We propose two options: one option is to lease existing abandoned farmland to cultivate grasslands and attract the cattle to graze there. The other option is to find a location near Mau Ping Shan with lower ecological value, clear the existing jungle, and then plant grasslands for the cattle to feed on. This not only can disperse the cattle population, preventing the accumulation of manure, but also can relieve the pressure on the existing grasslands, thereby enhancing their growth.

### **Grass Problems**

In addition to the cattle issue, the problem of the grasslands remains one of the most concerning issues on Tap Mun.

Our expert, Prof. Chau Kwai Cheong, agreed that the grasslands on Tap Mun currently have a very low self-recovery ability. Essentially, human intervention is required to restore or replant grasses to reverse the situation. Otherwise, the grasslands on Tap

Mun currently struggle to self-repair. This is because the soil on the grasslands has become very hard and compact, resulting in very low water retention. In addition, the grasslands on Tap Mun are affected by weathering, leading to a loss of nutrients in the soil, making it difficult for the grasslands to self-recover.

Based on the previous report, we recommend starting the restoration of grasslands within a 5- to 10-year plan. According to experts, the characteristic features of the grasslands on Tap Mun have been lost. Therefore, it is not possible to simply plant grass using seeds alone. The soil on the grasslands must be turned over, then fertilized and seeded to have a chance of restoring the grasslands. We recommend initially dividing the land into small, manageable spaces as an experimental basis, we can turn over the soil, seed, fertilize, and replant grass in each small space. This may allow us to restore the grasslands on Tap Mun.

According to expert recommendations, restoring the grasslands of Tap Mun requires the use of large tractors to cut the grass stems, which promotes grass growth. Furthermore, it is essential to increase the nutrients and water retention capacity of the soil to have a chance of successfully restoring the grasslands.

In addition to the issues related to grass growth, camping activities on Tap Mun also contribute to the degradation of the grasslands. Therefore, camping on Tap Mun must be regulated. We recommend educating the public about the importance of using the Tap Mun grasslands responsibly, including instructing them not to burn the ground. Furthermore, it is necessary to educate them not to pour substances such as sulfur onto the grasslands. Consequently, we suggest that the government may consider hiring a resident patrol team to monitor the condition of the grasslands, including observing user behavior and the condition of the grasslands. Areas of the grasslands

that have already been eroded should be subjected to less pressure. Similar to the impact of cattle grazing, we recommend removing the less ecologically valuable undergrowth from other shrub areas on Tap Mun to restore the grasslands. This would help to redistribute visitor numbers and allow for the creation of more grasslands, thereby increasing grassland habitat.

### **Succession of the Tap Mun Plants**

According to our analysis of aerial images, the Tap Mun grasslands can grow rapidly without human influence due to succession. In the past, most of the area was covered with grasslands and farmland, but due to the lack of management, natural succession has gradually transformed the grasslands into shrublands. Additionally, the presence of wild animals such as cattle and wild boars on the island has helped to spread weeds and other shrubs, resulting in most of the Tap Mun grasslands being replaced by shrublands. If we want to preserve the grassland habitat, we recommend removing a portion of the shrublands to slow down the succession process. This includes removing some of the Screw Pine as it grows rapidly and is abundant on Tap Mun. By controlling the number of Screw Pine trees and slightly reducing their growth area, we can create space for camping activities, which can help reduce the pressure on the existing grasslands. This will allow us to strike a balance between conservation and recreational uses, and promote sustainable development of the Tap Mun grasslands.

### **Terns' Conservation**

Following the recommendations of the short-term report, we suggest educating visitors on Tap Mun about terns and providing binoculars for them to observe the terns. In the mid-term report, we recommend strengthening the conservation efforts for terns. This includes conducting surveys of the rocky shorelines of Tap Mun that are not accessible to the public to determine if terns are nesting there. If terns are found

nesting in these rocky locations on Tap Mun, conservation efforts should be strengthened, including the provision of artificial nesting boxes or the establishment of conservation zone to prevent human access. We suggest collaborating with organizations such as Birdwatching Societies to conduct continuous surveys to understand the population numbers of terns over the past 10 years and to monitor any decline in their population.

Given the positive response to the 2024 Tern Festival, which effectively promoted conservation and education about terns, we recommend continuing to hold the Tern Festival in the future. Through this event, we can educate the public on proper birdwatching methods, reducing the impact of visitors on the outer islands of terns' breeding habits. The Tern Festival can continue to be held as a unique feature of their cultural events, promoting conservation and education for future generations.

### **Butterfly Conservation**

Based on current findings, butterfly conservation efforts on Tap Mun can be strengthened. The previous report suggested developing a butterfly garden within the King Lam School Education Centre to attract butterflies. According to this 5-10-year assessment, the King Lam School Education Centre on Tap Mun is projected to be completed within this period, and therefore, the centre can build a butterfly garden. We can invite the school or the public to visit the butterfly garden to learn about different butterfly species. We can also organize volunteer activities to educate them on how to manage the butterfly garden. Furthermore, to attract more butterflies, we suggest providing planting recommendations or educating local residents, or assisting them in planting nectar plants in their gardens, thus establishing multiple small butterfly gardens to attract a greater variety of butterfly species.

## 2. Culture Conservation

### Culture of “Chiu/Jiao”

The Tap Mun Chiu/Jiao Festival (a traditional Chinese religious festival) should have been completed during the period of the previous short-term report, i.e., in 2029. In this mid-term report, we propose showcasing their Chiu/Jiao Festival culture within the King Lam School Education Centre. Since we estimate that the Tap Mun King Lam School's Education Centre will have been completed within this period of time, the Chiu/Jiao Festival culture should be exhibited in this education centre. This is because the Chiu/Jiao Festival is a unique traditional feature and an example of Hong Kong UNESCO intangible cultural heritage. Therefore, the 2029 Chiu/Jiao Festival can be showcased during this period to the public.

### Tap Mun Possible Cultural Tour

We have discovered that the Tin Hau Temple on Tap Mun possesses many unique murals and statues. We suggest carefully and thoroughly investigating the stories behind each one. We can also invite university teams and students to come and study these stories within the Tin Hau Temple. Subsequently, we can organize cultural activities and in-depth tours centered around the ancient Tin Hau Temple on Tap Mun for the public. Besides learning about the Tin Hau Temple, we can then bring the public to the King Lam School Education Centre to learn about the local culture of Tap Mun, including its history as a small fishing village and the former learning environment of students.

As the Tap Mun Tin Hau Temple is a Grade 2 historic building and King Lam School is a Grade 3 historic building, we suggested that there must be a systematic set of documents for management and conservation to record the specific aspects that led to these two buildings being designated as historic buildings, and the reasons behind

it. Therefore, we recommend preserving the historical value of these two buildings in document form, and also educating the local villagers about the reasons why these two buildings became historic, as well as their specific features, to prevent improper demolition during future maintenance.

### **Village Founding Anniversary Celebrations**

In addition to the traditional culture of the Tin Hau Temple and King Lam School, the Tap Mun Fishermen's Village also has unique traditional festivals. 2034 will mark the 70th anniversary of the founding of the Tap Mun Fishermen's Village. As there are not many of these fishing villages in Hong Kong, we recommend promoting and raising awareness of their traditional culture during the 70th-anniversary celebrations. Furthermore, a 70th-anniversary exhibition could be held at the King Lam School Education Centre, allowing more public to understand the lives of the fishermen on Tap Mun.

## **3. Sustainable Tourism**

### **Education Centre and Tours**

During this reporting period, specifically the 6- to 10-year period, we believe the construction of the King Lam School Education Centre has been completed. This centre can then serve as a visitor information station, providing tourists with travel information and organizing regular tours for them to participate in. Additionally, village residents will be hired as tour guides. These guides will operate sustainable tours on a self-sufficient basis to generate income.

Once the King Lam School Education Centre opens to the public, it will feature three exhibition halls. These halls can showcase various themed exhibitions tailored to different public interests. According to current suggestions, one of the exhibitions may

focus on the uses of dinosaur fossils found in Hong Kong. Given that Port Island (Chek Chau) is near Tap Mun, the public can learn about dinosaur fossils at this exhibit before taking a speedboat to explore Port Island (Chek Chau). Additionally, one of the exhibitions can present the local culture and history of Tap Mun, including the Chiu/Jiao Festival culture, Tin Hau Temple culture, and the history of King Lam School, among others. Lastly, the final exhibition space can be used for different content based on various needs or rented out to different organizations to introduce various educational projects.

### **Explore Nearby Attractions**

In addition to the local ecology and culture of Tap Mun, we can use nearby attractions as themes for our tours. These include the dinosaur fossil site on Port Island (Chek Chau). We can depart from Tap Mun by speedboat to travel around Port Island, introducing the geography and fossil knowledge of the area. Furthermore, we can also organize tours departing from Tap Mun to Hoi Ha Wan, on the opposite shore, to introduce its ecology and culture, and to Ko Lau Wan, introducing the culture and history of that area. We can leverage our tourism experience over the past 5 years, and then expand to other locations, including Ko Lau Wan, Port Island, and Hoi Ha, which are near Tap Mun, to increase tourist flow.

The benefits of adding more tour destinations are that it can distribute the flow of people from Tap Mun, preventing overcrowding, and it can attract even more visitors. This allows tourists to have a richer experience. Therefore, Tap Mun will become a sustainable tourism destination, with Tap Mun as the central point of departure to visit other places. Because we have a visitor centre information station, we can use this station as a place for registration and a travel agency-like function to organize similar

tours.

### **Exploit Walking Trail**

Furthermore, we anticipate a gradual increase in visitor numbers to Tap Mun in the future. Based on our current observations, many tourists are arriving in Tap Mun after seeing recommendations on social media platforms like "Xiaohongshu" (Little Red Book). However, the limited walking areas for tourists in Tap Mun are putting increasing pressure on the grasslands. Therefore, we propose building a walking trail from Lung King Ting to the Lung Keng Kan area, allowing visitors to explore the area. Currently, there isn't a suitable path to Lung Keng Kan, making it only accessible to those with sufficient equipment and hiking experience. Developing a trail would help to redistribute visitor traffic and promote Lung Keng Kan as a sightseeing destination.

### **4. Sustainable Fisheries**

Currently, Tap Mun has several fish farms nearby, including the Hau Tsz Kok fish farm and the Tap Mun Outer Sea fish farm. We propose collaborating with these fish farms to re-cultivate unique species specific to Tap Mun, such as Tap Mun abalone, Tap Mun sea urchins. Additionally, Tap Mun has a stone-built fish farm owned by the villagers, we suggest that we could assist the villagers in rebuilding this fish farm. Then we can partner with university research teams to attempt to breed abalone and sea urchins in this fish farm. The goal is to determine if we can cultivate seafood with its own distinct characteristics unique to Tap Mun.

These locally raised seafood products would then be supplied to restaurants within Tap Mun. If production volumes are sufficient, we can also supply restaurants outside of Tap Mun, such as those in Tai Po and Sai Kung.

## **5. Community Engagement**

### **Public Engagement**

In terms of community involvement, there are many ways for the community and public to participate in our activities. These include organizing regular volunteer coastal cleanup events and volunteer activities within the King Lam School Education Centre, such as planting plants and removing weeds. Furthermore, we have observed many tourists feeding the cattle and wild boars during their visits. Therefore, we need to educate the public about the issues associated with feeding wild animals through various activities. We also need to educate them about proper countryside etiquette. Based on our previous suggestions, activities such as collecting cow dung for composting and finding new areas for planting grass are also opportunities for public participation.

### **Tern Festival Engagement**

In addition to these volunteer activities, we wish to organize a regular Tern Festival event every year, allowing community members to regularly participate in these events. Based on our past experiences with the Tern Festival, it can attract villagers to sell goods, including snacks and provide traditional performances, which can enhance the villagers' sense of belonging. The public has also indicated that the Tern Festival allows them to understand the culture of Tap Mun and the importance of tern conservation.

### **Villagers' Engagement**

Once the King Lam School Education Centre is completed, Tap Mun villagers will be able to join our team as guides, speedboat operators, or volunteer supervisors,

enabling them to serve their community while also increasing their income.

## **6. Governance Collaboration**

### **Collaboration with government departments**

Currently, our role remains as a bridge between villagers and government departments, or between villagers and volunteer organizations. Therefore, we will continue to collaborate closely with various organizations, such as the relevant departments of the Agriculture, Fisheries and Conservation Department (AFCD), to discuss issues like wild boar management and cattle sterilization. In the future, as we develop a sustainable tourism project at King Lam School, we will maintain close ties with the Tourism Development Board and the Countryside Conservation Office. If we need to redevelop grasslands in Tap Mun other areas, we will continue to collaborate closely with the Lands Department. And if we plan to build a walking trail, we will need to work even more closely with relevant lands-related government departments to ensure a successful project.

### **Collaborations with Transportation Parties**

In addition to addressing local issues in Tap Mun by collaborating with government departments, we will also continuously monitor and pay attention to the traffic problems in Tap Mun. As the demand for ferry services increases on weekends and public holidays, we need to establish a more effective management system to allocate ferry usage. For example, we can utilize the "Smart Countryside" approach to calculate the number of visitors on Tap Mun Island, making it easier to schedule ferry services. Moreover, we will work with bus companies to arrange connecting bus services at Wong Shek Pier to and from Sai Kung, providing a convenient and efficient transportation system for visitors. By doing so, we can alleviate traffic congestion and



make it easier for people to visit Tap Mun and surrounding areas.