

Environment and Conservation Fund

**Nature Conservation Management Agreement Proposal –
Management Agreement on the Private Land
with High Conservation Value at
Fung Yuen Valley Site of Special Scientific Interest
in Tai Po, Hong Kong (2013 – 2016)**

Purpose

This paper invites Members' advice on a funding application submitted by the Tai Po Environmental Association (TPEA) under the Nature Conservation Management Agreement (MA) Scheme.

Background

2. Fung Yuen Valley is a forested ravine situated on a south-facing hillside northeast of Tai Po. The site is dominated by secondary woodlands but extensive areas of grassland and shrubland-grassland mosaic are also present on the more exposed areas of the hillside. The ecological value of Fung Yuen Valley is widely recognized due to its rich butterfly diversity and was designated as a Site of Special Scientific Interest (SSSI) in 1980. Fung Yuen Valley was also included as one of the 12 Priority Sites for Enhanced Conservation with an aim to better protect and conserve this ecologically sensitive area, in particular the land under private ownership within the site. The total area of the Priority Site is 42.7 ha, of which 3.4 ha or 7% is private land.

3. To maintain and enhance the ecologically important Fung Yuen Valley SSSI, the Agriculture, Fisheries and Conservation Department (AFCD) has been carrying out habitat management work in the Government land portion of Fung Yuen Valley SSSI since 2001. The major tasks include clearance of the invasive alien weed, *Mikania micrantha*, vegetation management to enhance habitat and plant diversity, enrichment planting of butterfly larval food plants and nectar source plants as well as maintenance of fire breaks to protect the SSSI from fire risk that may spread across from adjacent burial grounds.

4. The private land within the SSSI, however, did not receive any habitat management prior to the implementation of a MA project in 2005, and was under a number of threats such as collection of butterflies, overgrowth of invasive alien

weeds and habitat degradation.

Recurrent Subsidy to MA projects

5. The experience in the past years showed that it would be very unlikely for MA projects to be self-financing. Most of the activities being carried out under the MA scheme, for example engagement of landowners or tenants in conserving private land of ecological importance, various habitat management work (e.g. planting crops that attract bird species, clearing invasive species for the protection of the habitats etc.) or conducting surveys for monitoring purpose, are for the purpose of conserving and enhancing the natural environment rather than generating income. They are by nature almost inevitably not profitable. Also, in order to preserve the ecological values of the sites, income-generating activities conducted by the applicants (such as eco-tours and other educational activities) must be confined to within appropriate limits. It is therefore impracticable to expect the MA to become self-sufficient even in the long term. Considering the above, in 2011, the Environment and Conservation Fund (ECF) agreed to amend the ECF funding guideline to expressly provide continuing funding support to the MA scheme. Nonetheless, all MA applications will still be supported on a time-limited basis (generally not longer than 3 years) and each application has to be assessed on its own merits.

Previous MA Projects

6. Since 2005, MA project has been carried out at Fung Yuen by the TPEA with funding from the ECF. The project aims at conserving and enhancing the natural habitat of butterflies in Fung Yuen Valley SSSI through signing management agreements with local landowners. The MA project has successfully demonstrated its effectiveness in maintaining and enhancing the habitat quality of Fung Yuen SSSI for butterflies, conserving and enhancing the biodiversity of the area, as well as boosting the education value of the ecologically important site through active community involvement in the project.

7. Enhancing the habitat quality in favor of butterflies is the primary conservation goal of this MA project. Habitat restoration has been carried out by TPEA in order to attract more butterfly species to the area. The number of butterfly species has increased from 162 in 2005 to over 200 in 2012, which accounts for over 80% of the butterfly species recorded in Hong Kong. Some very rare butterfly species like *Pelopidas subochraceus* (近赭殼弄蝶), *Celaenorrhinus*

leucocera (白觸星弄蝶), and *Caltoris bromus* (無斑珂弄蝶) have also been recorded in Fung Yuen since the implementation of the MA project.

8. The area managed under the MA project (i.e. the Fung Yuen Butterfly Reserve) has also provided suitable habitats for other faunal groups in Fung Yuen. Ecological surveys carried out under the MA project have indicated that the site supports a diverse assemblage and proportion of other taxa groups such as dragonflies and damselflies (34%), birds (17%), amphibians (43%), reptiles (30%), mammals (35%) and fireflies (30%), showing that the MA project contributes not only to the provision of a suitable habitat for butterflies but other faunal groups are also benefited from the proper management of the habitats there.

9. Public engagement and education is one of the major programmes of the Fung Yuen MA project. Over the past years, TPEA has boosted stronger community involvement in the project through organizing various education activities such as exhibitions, eco-tours, volunteer activities, seminars, monthly butterfly festivals and annual butterfly carnivals. The project has drawn considerable media attention and over 300 media interviews, 700 talks and 1,500 eco-tours were held. Besides, more than 50,000 participants have visited the butterfly reserve since its operation in 2005.

10. In recent years, however, there have been increasing public concerns over the potential threats on the butterfly diversity and richness at the Fung Yuen area due to the nearby developments. Therefore, long-term conservation management of the Fung Yuen Butterfly Reserve is of paramount importance so that it could continue to serve its vital functions both as a refuge area for butterflies and other wildlife in the area and an outdoor education centre on biodiversity conservation for the public.

11. For the most recent approved MA project at Fung Yuen, ECF granted a total of \$5,035,876.65 to TPEA for implementing the project for the period from February 2010 to January 2013.

The Current Application

12. The present Fung Yuen MA project will end on 31 January 2013. In this connection, TPEA has submitted an application to seek ECF's support to launch a new MA project. The project will last for three years (from February 2013 to January 2016). The goal of the current application is to maintain the impetus of the previous MA projects and to further enhance the ecological value of

the ecologically important private land at Fung Yuen.

13. For the long-term management and conservation of the Fung Yuen areas, the applicant has proposed an updated management plan of Fung Yuen with extension of habitat management area, long-term ecological monitoring, and increased financial sustainability of the project.

14. Under the current application, the habitat management area will be expanded by 17% to cover more private land in the area so as to enhance the ecological integrity of the Priority Site. About 2 ha of land areas would be under active management and conservation in the proposed project. Stronger collaboration with local land owners would therefore be achieved. Habitat restoration of degraded farmlands including planting of butterfly host and nectar plants will be carried out in the extended area.

15. In the light of the public concern over the potential adverse environmental impact from a nearby residential development, long-term ecological survey on butterflies and other taxa groups as well as environmental assessment and monitoring will be conducted for this proposed project. The scientific information collected would help formulate long-term conservation and management strategies for the ecologically important area at Fung Yuen.

16. To deepen community ownership of nature conservation work and raise the financial sustainability of the project, the applicant has explored various means to seek alternative funding, such as private sponsorship and organization of income-generating activities. The project would generate revenues from daily entrance fees and sales of products (equivalent to about 2% of the total project budget) while the project team would also seek additional funding from Quality Education Fund (about 3% of the total project budget) for promoting public education on the conservation of butterflies and the nature in general.

17. According to the proposed budget, the applicant requests for a grant of \$7,774,266.15 (approximately \$2.6 million per year) to cover the increase in management areas and the strengthened biodiversity management programmes.

Recommendations

18. AFCD and the Environmental Protection Department have examined the application in accordance with the following vetting criteria for MA application–

ECF Paper 38/2012-13
For discussion

- (a) the benefits that a proposed project will bring to the efforts in enhancing the conservation of the site concerned, better achieving the nature conservation objectives, and evaluating the effectiveness of this new conservation measure;
- (b) the sustainability of a proposed project including its resource implications, participation of the landowner(s) and local community, nature and enforceability of the management agreement concerned;
- (c) the technical and project management capability of the applicant organisation, as well as its track record, including the effectiveness of past projects, and its ability to comply with funding conditions;
- (d) whether the proposed project's schedule of implementation is well-planned and practicable, and the duration is reasonable;
- (e) whether the proposed budget is reasonable and realistic, and whether the project is cost-effective, with full justification for every expenditure item; and
- (f) whether the proposed project has alternative sources of funding, and whether it would be more appropriate for the proposed project to be funded by other sources

19. We consider that the proposed project is worth supporting as it will enable a host of conservation and education programmes to be run for the benefit of enhancing the biodiversity at the concerned site and promoting nature conservation to the public. We also consider it essential to maintain the momentum of the conservation efforts made by the previous MA projects. The two departments' assessment is at **Annex B** for Members' reference. In particular, we have conducted a detail assessment on the cost-effectiveness of the MA project as summarised at **Annex C**.

Nature Conservation Subcommittee under the Advisory Council on the Environment

20. The Nature Conservation Subcommittee under the Advisory Council on the Environment was consulted on the application on 30 November 2012. The meeting unanimously gave support. The meeting advised TPEA to conduct studies in particular on the potential ecological impacts to Fung Yuen Butterfly Reserve due to the nearby high-rise development. The meeting also suggested TPEA to

think ahead of ways to engage future residents of the nearby development, with an aim to raise their awareness on the protection of butterflies at Fung Yuen area.

Advice Sought

21. Members are invited to advise whether the MA application should be supported and, if supported, the exact amount of funds to be granted.

Agriculture, Fisheries and Conservation Department
Environmental Protection Department
December 2012