

Confirmed Minutes of the Nature Conservation Subcommittee Meeting
held on 21 December 2016 at 2:30 pm
in Conference Room, 33/F, Revenue Tower, Wan Chai

Present:

Prof CHAU Kwai-cheong, BBS, JP (Chairman)

Ir Cary CHAN

Prof FUNG Tung

Dr Billy HAU

Dr Michael LAU

Prof Nora TAM, BBS, JP

Dr Eric TSANG

Ir Conrad WONG, BBS, JP

Mr Stanley WONG, SBS, JP

Ms Becky LAM (Secretary)

Absent with Apologies:

Prof Albert LEE

Prof John NG

Ms Pansy YAU

In Attendance:

Environmental Protection Department (EPD)

Mrs Vicki KWOK

Ms Vivian CHAN

Mr Eric LIU

Miss Dora CHU

Mr Alan CHUNG

Miss Apple LEUNG

Deputy Director of Environmental Protection (2)

Senior Administrative Officer (Nature Conservation)

Forestry Officer (Nature Conservation)

Executive Officer (CBD) 1

Executive Manager (CBD)

Executive Officer (CBD) 2

Agriculture, Fisheries and Conservation Department (AFCD)

Mr Simon CHAN

Dr Jackie YIP

Ms Sunny CHOW

Dr Evelyne KUO

Assistant Director (Conservation)

Senior Conservation Officer (Biodiversity)

Senior Wetland & Fauna Conservation Officer
(Acting)

Conservation Officer (Biodiversity)

In Attendance for Item 2:

For the applications of “Fishpond Conservation Scheme in Ramsar Site 2017-19” and “Hong Kong Got Fishpond – Eco-fishpond Management Agreement Scheme 2017-2019”

Dr NG Cho-nam	Vice-chairman, Hong Kong Bird Watching Society (HKBWS)
Mr LO Wai-yan	General Manager, HKBWS
Dr PANG Chun-chiu	Research Specialist, HKBWS
Ms YEUNG Lee-ki, Vicky	Assistant Project Manager, HKBWS

For the application of “Nature and Human in Harmony - Nature Conservation Management for Long Valley 2017 – 2019”

Dr NG Cho-nam	Vice-chairman, HKBWS
Mr SO Kwok-yin, Ken	Chief Executive, Conservancy Association (CA)
Ms HUI Shuk-kwan, Kami	Assistant Conservation Manager, CA
Ms YEUNG Lee-ki, Vicky	Assistant Project Manager, HKBWS

For the application of “Management Agreement Scheme at Lai Chi Wo Enclave 2017-2019”

Dr NG Cho-nam	Vice-chairman, Hong Kong Countryside Foundation (HKCF)
Mr SO Kwok-yin, Ken	Chief Executive, CA
Dr Angie NG	Senior Conservation Manager, CA

Action

The Chairman welcomed Members to the meeting and informed that apologies of absence had been received from Prof Albert Lee, Prof John Ng and Ms Pansy Yau.

Item 1 : Matters Arising

2. The Chairman recapped that a site visit to the Tai Sang Wai and Lut Chau Fishponds was organized on 31 October 2016.

Item 2 : Applications under Nature Conservation Management Agreement Scheme ***(NCSC Paper 3/2016)***

3. The Chairman informed Members that four Management Agreement (MA) applications had been considered by the Assessment Panel which

comprised members from the AFCD and EPD. These included two applications for renewal of the MA projects for fishpond conservation in the Ramsar Site Priority Site and Deep Bay Wetland outside Ramsar Site Priority Site, one application for renewal of the MA project in Long Valley and Ho Sheung Heung Priority Site, as well as a new application submitted by the HKCF in association with the CA for habitat rehabilitation at Lai Chi Wo Enclave.

4. In order to avoid conflict of interests, the Chairman invited Members who were directly or indirectly related to the MA projects to declare conflict of interests before the discussion of the two applications.

5. A Member declared that he was an independent assessor for the revitalization project at Lai Chi Wo which was currently funded by the Hong Kong Bank Foundation. Two Members declared that they were members of HKBWS. A Member further declared that he was the Vice President of CA and suggested with the agreement of the Chairman that he would refrain from taking part in the discussion of the latter 2 applications. He also mentioned that one of the representatives of the HKBWS was a postdoctoral fellow at his institution. Members agreed that both Members could stay on and participate in the discussion; and one of the Members could stay on and participate in the discussion, but should refrain from taking part in the deliberation of the latter two applications.

6. As invited by the Chairman, Dr Jackie Yip and Ms Sunny Chow briefed Members on the background, key objectives, scope as well as the assessment and recommendations of the four MA projects.

[Representatives of HKBWS joined the meeting at this juncture.]

Fishpond Conservation Scheme in Ramsar Site 2017-19 and Hong Kong Got Fishpond – Eco-fishpond Management Agreement Scheme 2017-2019

7. By way of a powerpoint presentation, Ms Vicky Yeung briefed Members on the achievements of the Fishpond Conservation Scheme in Ramsar Site as well as the Hong Kong Got Fishpond – Eco-fishpond MA Scheme between 2015 and 2017. She introduced the objectives, goals, features and sustainability of the new MA applications.

Increasing public awareness on wetland conservation

8. While noting that there would be a significant increase in the expected income generated in the project, a Member opined that the financial return of the projects should not be a major concern. A greater focus should be placed on the participation rate of the activities held, and more on-site activities should be arranged to provide visitors with the opportunity to appreciate the beauty and value of the fishponds. He observed that amongst the total targeted number of participants, most of them had only participated in off-site education activities

such as exhibitions. He suggested that the applicant could consider collaborations with other MA projects, such as establishing an educational package or award scheme, with the aim of motivating students and the general public to take part in more activities under the MA projects.

9. In response to the Member's concern in relation to on-site activities, Dr Ng Cho-nam explained that the capacity of the fishponds was inadequate in terms of their accessibility and the availability of ancillary facilities, and increasing the number of visitors was not feasible until the infrastructure could be improved. He explained that with narrow roads for accessing the fishponds, for instance at Tai Sang Wai, the size of the coaches for transporting visitors to the sites was constrained. For the linking up of different MA projects, Ms Vicky Yeung said that there were currently school and corporate tours with multiple destinations such as fishponds and farmlands at Nam Sang Wai and Long Valley. While 85,000 out of 120,000 participants only took part in outreach activities such as exhibitions, she said that such activities could help raise the awareness of people who were unwilling or did not have the time to travel to remote areas.

10. In view that the improvement of infrastructure for expanding the capacity of the fishponds for receiving visitors would take a considerable amount of time, the Chairman suggested that the number of visitors could be increased by organizing more tours on weekdays.

11. A Member suggested HKBWS to explore charging the participants of eco-tours an amount equivalent to or higher than the cost so as to free up resources for promotion or other purposes. Any surplus income could be used to strengthen the infrastructure, such as providing more screening to reduce disturbances to the environment.

12. Ms Vicky Yeung explained that for 2015-17, the income generated from organizing eco-tours for the public and corporates could cover the costs for hiring coaches and subsidizing the tour guides. While corporates in general could afford to pay a higher fee, she pointed out that charging a higher fare might possibly lead to a lower participation rate. Nevertheless, it would be an ultimate goal to organize self-financing eco-tours in the long run.

Collecting feedback via questionnaire surveys

13. On top of the participation rate, a Member followed that it was important to examine the change in environmental consciousness of participants through questionnaires so as to assess the effectiveness of the activities and to make improvements accordingly. This could be done by inviting the participants to specify their reasons of participation in the questionnaire. Having consulted the Member on the design of the questionnaire earlier, Ms Vicky Yeung said that pre and post activity questionnaire surveys had been conducted for those activities with longer duration under the 2015-17 projects,

and a more general questionnaire survey was conducted for all other activities. It was observed that there was in general an increase in the participants' knowledge towards the local fisheries industries as well as support for the local fisheries products. She agreed to further review the design of the questionnaire survey so as to collect information regarding the reasons of participation in upcoming activities. Following the Member's suggestion that the results of the questionnaire surveys should be publicized, the Chairman advised that HKBWS would be required to include the results in their final report for public information.

14. A Member opined that it was vital to raise the awareness and knowledge of the fishpond operators and the general public on wetland conservation. On top of conducting pre and post activity questionnaire surveys, she suggested that HKBWS should also collect information about the broader general public's awareness and attitude towards fishpond conservation, such as online questionnaire surveys, with a view to gauging the view of the general public on the effectiveness of the project's public education and publicity programmes. The attitude change in fishpond operators should be noted, in particular, on whether they were willing to sustain the practice of fishpond draining even if the financial support was discontinued. Instead of producing large amounts of printed materials, the Member further suggested with the support of another Member that HKBWS should consider doing more promotions via electronic means to save resources and at the same time could reach the younger generation more effectively.

15. Ms Vicky Yeung thanked for the idea of online questionnaire survey to collect information about the general public's awareness and attitude towards fishpond conservation. She explained that feedback from fishpond operators had been collected via a questionnaire survey. While the survey results were being analyzed, she was happy to see that two fishpond operators had become members of HKBWS.

16. In reply to a Member's observation that the percentage of engaged fishpond area which had decreased significantly in 2016-17 when compared with 2015-16, Ms Vicky Yeung explained that the difference reflected seasonal fluctuations. In view that the 2016-17 statistics were up to November 2016 only, she explained that most fishpond operators conduct draining during the winter and the percentage of engaged fishpond area rebounded in December 2016. A small decrease in the percentage of engaged fishpond area was due to the change of landuse at Fung Lok Wai.

Fishpond wiring or bird preventive netting

17. A Member recognized the importance of fishpond conservation and expressed appreciation towards the work of the HKBWS. While fishpond operators participating in the projects would commit to perform fishpond drain-downs, the Member was concerned that pond wiring or bird preventive

netting deployed by some of the operators might lead to foraging difficulties, especially for large waterbirds.

18. Dr Ng Cho-nam explained that there was a need to strike a balance between supporting the fisheries industries as well as bird conservation. He pointed out that fishpond operators would be reluctant in participating in the scheme if they were to incur large operational losses, and the Government had been facilitating fishpond operators to install bird preventive netting with a view to reducing their loss due to bird predation. Under the MA project, engaged fishpond operators would be required to conduct drain-down and allow waterbirds to forage at the drained fishponds without disturbance after the harvesting of fish. Ms Vicky Yeung supplemented that the operators of heavily wired fishponds along Tam Kon Chau Road, which were located within the Ramsar Site, were currently not engaged in the MA project. HKBWS would further liaise with them and invite them to join the project. She mentioned that as the local demand for freshwater fish had declined, many fishpond operators had resorted to bird preventive measures to reduce their loss, or even converting to shrimp farming, which required them to cover up their fishponds entirely during the winter. It would be important to promote the local freshwater fish market with a view to making the industry more profitable and in turn increasing the resilience of the fishpond operators to bird predation. According to the observations of the researchers, she explained that pond wiring with a density recommended by AFCD had insignificant impact on ardeids and small waterbirds but not the Great Cormorants. She shared that there was a precedent case in which a fishpond operator was denied of management fee of a particular fishpond as his fishpond was wired too densely for foraging by ardeids.

Conducting baseline studies

19. A Member questioned the need for conducting further ecological baseline studies, given that a sizeable database had already been established over the past years. Ms Vicky Yeung explained that the scope of the baseline studies would be restricted to bird and plants only, and that for reptiles as well as dragonflies would not be conducted. For better utilization of resource, the Member suggested HKBWS to consider lowering the frequency of ecological baseline studies.

Eco-fish

20. While expressing support towards the idea of establishing eco-fish fishponds, a Member observed that the cost of the project exceeded the expected income to be generated. He enquired about the sustainability of the project in terms of the business model.

21. Ms Vicky Yeung explained that due to market uncertainties and the inexperience of HKBWS in running a business, a more conservative approach had been adopted in estimating the budget required. The unit price of eco-fish

was proposed to be marked up by 2 to 3 times of the current market price and might be adjusted according to market response. In reply to a Member's question regarding the timeframe of the eco-fish programme, Mr Lo Wai-yan said that HKBWS would make reference to the experience of local organizations, explore different modes of operation, and develop a management model in the first two years. It would take time to promote and appeal for the cooperation of fishpond operators, and to devise the operational details, which included fish farming, harvesting, logistics, processing, packaging and selling. Based on the progress, further measures might be proposed when renewing the MA project.

22. A Member recalled that during the site visit to the fishponds on 31 October 2016, the fishpond operators had reflected that the high unit price of fish was due to the high supply chain costs, and they were considering a more direct selling opportunities. Dr Ng Cho-nam agreed that the fish price could be much lower via direct selling, and shared that some of the fishpond operators had been making necessary arrangements to establish direct selling channels. In an effort to promoting local freshwater fish, the Secretary for Food and Health, Director of Agriculture, Fisheries and Conservation and Mr Lam Chiu-ying had been invited to introduce different Grey Mullet recipes on a Roadshow programme. He pointed out that the sustainability of the fisheries industry was of utmost importance for the conservation of the fishpond habitats.

Organic certification

23. Mr Lo Wai-yan agreed to explore the feasibility of the Chairman's suggestion to obtain organic certification for eco-fish. He however pointed out that the task was very difficult and the investment cost and risk involved could be inhibiting to most of the fishpond operators.

[Representatives of HKBWS left the meeting at this juncture.]

Deliberation

24. Members generally supported both applications with the following conditions:

- (a) HKBWS should reduce the cost on scientific research studies, where appropriate, and allocate more resources on public education activities in order to increase on-site participation;
- (b) HKBWS should conduct questionnaire surveys aimed to reveal any change of attitude of the participants as well as that of fishpond operators after joining the programme. The driving factors for public participation in the activities should also be analyzed;
- (c) In addition to conducting questionnaires surveys on programme

participants, HKBWS should also collect information about the broader general public's awareness and attitude towards fishpond conservation, e.g. by using online questionnaire surveys, in order to gauge the effectiveness of the project's public education and publicity programmes on the general public;

- (d) HKBWS should include the results of the questionnaire surveys in the Progress Reports and Completion Report; and
- (e) HKBWS should explore to optimize the education value of the MA projects by linking and integrating the different MA projects under their management to develop an education tool kit or experiential learning package for students.

[A Member and Ms Sunny Chow left the meeting at this juncture.]

Nature and Human in Harmony - Nature Conservation Management for Long Valley 2017 – 2019

25. With the aid of a powerpoint presentation, Mr Ken So briefed Members on the progress and achievements of the current project, and introduced the objectives and overview of the new project.

Crop Productivity

26. With a view to increasing crop productivity, the Chairman suggested that the project team could make reference to the farming technique in the Pearl River Delta, where legumes were grown in between harvests to facilitate nitrogen fixation and improve soil quality.

Experience and knowledge transfer

27. Based on the experience accumulated from running the project since 2005, a Member enquired whether any improvements were proposed for the new project. Ms Vicky Yeung explained that having conducted reviews, some measures that were found to be less cost-effective were discontinued, for instance dry farming and fishpond draining at Long Valley. The frequency of monitoring and survey works had also been reduced over the years given that a substantial database had already been established. As regards public involvement activities, Ms Yeung said that the participation rate of eco-farming experiential programmes was on the low side and therefore had not been proposed for the new project. Mr Ken So supplemented that with well-established habitat management measures, a greater focus had been given to branding and promotion of local agriculture in recent years.

28. Dr Ng Cho-nam said that the Government was planning to resume the farmland in Long Valley for the development of the North East New Territories

(NENT) New Development Areas (NDA). Given that the timetable was still unclear, the project team aimed to conserve Long Valley during the transitional period via the MA project. He remarked that a comprehensive review should be conducted to provide useful information for the management and development of this area after the resumption of farmlands for the establishment of the Long Valley Nature Park under the NENT NDA project. Special attention should be drawn to the irrigation system which was essential for sustaining the wetlands at Long Valley. Currently, water was drawn by villagers via an aqueduct from a dam near River Beas to irrigate the farmlands in the entire Long Valley.

29. For the successful establishment of the Nature Park, a Member opined that it was important for the project team to systematically record their experience, for instance in habitat management, education and the irrigation system, for sharing with the Government, non-government organizations (NGOs) and the public. Another Member concurred with the Member and followed that the NENT NDA project provided challenges as well as opportunities for the better conservation of Long Valley. The Chairman added that the experience and knowledge should be recorded in details in the final report.

30. In reply to the Chairman's enquiry about the proposed agricultural park under the New Agricultural Policy, Mr Ken So explained that information regarding the exact location and area of the agricultural park was yet to be released. Dr Jackie Yip added that the Nature Park at Long Valley was proposed as an ecological mitigation measure to mitigate for the loss of habitats under the NENT NDA project.

Collecting feedback via questionnaire surveys

31. Similar to the other projects, the Chairman said that on top of the participation rate, the effectiveness of activities in changing the attitude of participants was important. With reference to the low feedback rate, a Member followed that the project team should review the methodology, objectives, target group and design of the questionnaire surveys.

32. Mr Ken So clarified that rather than having a low feedback rate, the size of the target group was small as the pre and post questionnaire surveys were only launched in early January and applicable to activities with a longer duration. The questionnaire survey was based on that designed by Dr Eric Tsang for the Fishpond MA Schemes with a view to understanding the knowledge and behavioural changes of participants of activities.

33. Given that the project had been conducted for over 10 years, a Member suggested that information about the broader general public's awareness and attitude towards Long Valley should be collected, such as through online questionnaire surveys. This could help gauge the effectiveness of the project's public education and publicity programmes on the general public and provide

useful information for the establishment of the future Nature Park.

[Representatives of CA and HKBWS left the meeting at this juncture.]

Deliberation

34. Members generally supported the application with the following conditions:

- (a) To facilitate the transition to and inform the management of the future Long Valley Nature Park, CA should submit a comprehensive review summarising their experience in the past decade in managing the Long Valley MA project by mid-2018, including but not limited to notes on the site-specific management of the local habitats and hydrology, and the roles and engagement of the local stakeholders;
- (b) CA should consult experts with good farming experience, with a view of improving the productivity of the agricultural fields;
- (c) CA should conduct questionnaire surveys aimed to reveal any change of attitude of the participants as well as that of local stakeholders after joining the programme. The driving factors for public participation in the activities should also be analyzed;
- (d) In addition to conducting questionnaires surveys on programme participants, CA should also collect information about the broader general public's awareness and attitude towards wetland conservation e.g. by using online questionnaire surveys, in order to gauge the effectiveness of the project's public education and publicity programmes on the general public;
- (e) The questionnaires should be vetted by an expert in social science, and CA should include the results of the questionnaire surveys in the Progress Reports and Completion Report; and
- (f) CA should explore to optimize the education value of the MA projects by linking and integrating the different MA projects under their management to develop an education tool kit or experiential learning package for students.

Management Agreement Scheme at Lai Chi Wo Enclave 2017-2019

[Representatives of HKCF and CA joined the meeting at this juncture.]

35. With the aid of a powerpoint presentation, Dr Ng Cho-nam briefed Members on the geographical location of Lai Chi Wo, the historical context of the Lai Chi Wo village, and the objectives, major conservation measures and community engagement of the MA project.

Engagement with local stakeholders

36. A Member enquired about the incentives provided to private landowners and local farmers to undertake conservation activities and the effectiveness of these measures. In addition, she observed that the estimated coordination costs for the project in Long Valley accounted for about 38% of the proposed total budget and the management area was about 18.3 hectares, whereas the estimated coordination costs for Lai Chi Wo project was about 48%. Given the management area for Lai Chi Wo project was only about 5.0 hectares, she questioned the relatively high percentage of administrative and coordination cost accounted for in the latter project.

37. Dr Ng Cho-nam explained that most private landowners who were from the older generation emigrated overseas in the 1960s, and many of their descendants had been living overseas for many years. He said that the Lai Chi Wo project was initiated together with a local village chief who wished to rehabilitate the village. Dr Ng further explained that there were no resident farmers in Lai Chi Wo, thus recruitment and deployment of staff and farmers to carry out revitalization and conservation work was necessary, resulting in the high manpower input. In contrast, the project proponents in other MA projects mainly played a coordination role in fostering and enhancing a partnership with the local community. He acknowledged the difficulty in the recruitment of staff and volunteers to assist in the project due to the remote location of Lai Chi Wo in comparison to Long Valley. As such, higher transportation and operation costs would be incurred. Also, given the constraints on transportation and logistics, they aimed to sell the eco-produce at local farmer market at Lai Chi Wo.

38. A Member suggested that engagement of the local stakeholders in conservation activities, rather than hiring staff to perform the actions, was a core element of the MA scheme, and was also important in ensuring project sustainability in terms of operation and cost. She further enquired on the need to recruit full-time skilled farmers given the area concerned was only 5 hectares. As for the sales of eco-produce, she suggested that the project proponent should explore ways to promote the eco-produce to participants of eco-tours, who would have great interest to purchase such products.

39. Dr Ng Cho-nam explained that it would be difficult to engage the local villagers to physically participate in the project given their advanced ages, but reiterated their trust and support had been gained. For instance, the project's supporting organisation, HakkaHome - Lai Chi Wo, was a social enterprise founded by the villagers, and assisted with selling the eco-produce to participants of eco-tours and education programmes on Sundays. He further emphasized the need to grasp the opportunity to revive Lai Chi Wo village and engage retired and emigrated villagers that returned from overseas in preserving the village's local culture and traditional value. He explained that if the older generation was not engaged, it would be more difficult to engage the younger

generation who shared little memory and feelings about their roots.

Financial support

40. A Member sought clarification if the initial community revitalization and farmland rehabilitation project launched in 2013 was funded by HSBC. He noted that a new project on incubating village economy and education would be proposed by the project proponent with the aim to obtain funding support from HSBC. He enquired if HSBC would continue to provide financial support, and if the answer was in the affirmative, whether there was a need to apply for funding under the MA scheme.

41. Dr Ng Cho-nam explained that HSBC had provided seed money to kick start the “Living Water and Community Revitalization programme” at Lai Chi Wo from December 2013 to September 2017. While the HSBC funding allowed the re-creation of irrigation channels and rehabilitation of some of the farmlands, the project’s focus was on water sustainability rather than on biodiversity and habitat enhancement. Although the HSBC funds laid the foundations and helped decrease the set up cost for the proposed MA project, funding from the ECF was needed to continue the conservation work, as well as rehabilitate other farmland areas. He explained that the direction for 2017 onwards would be to obtain funding from HSBC, Hong Kong Jockey Club (HKJC) and the ECF to support three independent yet complementary projects at Lai Chi Wo. Mr Ken So supplemented that there would not be further funding support from HSBC to sustain the agricultural activities at Lai Chi Wo, thus it was necessary to apply for ECF funding under the MA scheme to continue the farmland rehabilitation work. Other components of the initial HSBC project would be divided into a “Hakka Life Experience Village at Lai Chi Wo” project to be funded by HKJC, and a new project on incubating village economy and education would be proposed to HSBC.

42. The Chairman enquired whether the equipment purchased in the initial HSBC project would be retained by the project proponent. Dr Angie Ng said that large scale farm equipment and machinery purchased by HSBC funds would belong to the principal leader of the HSBC project, which was HKU. As such, more equipment might need to be purchased for the proposed MA project.

43. The Chairman sought clarification if HKU was considered a non-profit organisation, and whether they could provide expertise and volunteers to support the research and survey works, such that the estimated cost in recruiting professional managers and volunteers of the proposed MA project could be reduced. In response, Dr Ng Cho-nam explained that HKU was initially involved in the HSBC project, but would not be engaged in the proposed MA project. Mr Ken So supplemented that the proposed MA project would be managed by the applicant organization, i.e. HKCF; and the co-organisier, CA, and there would be no direct engagement with HKU.

The planning vision of Lai Chi Wo

44. A Member enquired about the long term planning vision of Lai Chi Wo, as he envisaged that the development and management of Lai Chi Wo would continue beyond the proposed project duration of two years. In response, Dr Ng Cho-nam acknowledged that there remained some uncertainties at this stage; nevertheless, he observed that there had been a growing trend for ecotourism development at Lai Chi Wo. One of the objectives under the HKJC project was to revitalize the community including preserving Hakka culture and traditions. This would be achieved by the conservation of 25 traditional Hakka houses, in which about 20 of them would serve as guesthouses for visitors staying at the “Hakka Life Experience Village”. The farmland rehabilitation under the proposed MA project could complement the development of the Hakka village. For example, eco-produce could be sold to the tourists or used for cooking some rural village dishes for the visitors. In the long run, he hoped that the Government would improve the accessibility of Lai Chi Wo with convenient public transportation network and facilities for tourists.

Production of crops and crop yield

45. A Member noted that most of the proposed management areas were dry agriculture fields, which had a lower ecological value compared with wet agricultural fields, and considered that the estimated crop yield was rather low.

46. Dr Ng Cho-nam emphasized the concept of farming for conservation, and that the management of farmland served more purposes than production *per se*. He explained that rehabilitating dry farmland through eco-friendly agriculture would enhance the ecological functions of those habitats for species such as butterflies, and would also engage the local community in the management of the habitats. As such, manpower input such as full-time farmers and volunteers would be essential to the careful management of land farmed.

47. Dr Angie Ng explained that much effort had been spent during the two years of the HSBC project to re-establish the irrigation channels in order to rehabilitate the farmland, due to constraints in the local hydrology and decades of farmland abandonment. She acknowledged that the production of crops was relatively low at the moment, and that they were still conducting trials to ascertain which types of crops would best grow at the farmlands. She therefore adopted a rather conservative projection in the crop yield under the MA project.

Promotion of eco-produce

48. A Member opined that the remoteness of the location might be a limitation to the promotion and sales of eco-produce. He therefore enquired if the current area and scale of farmland cultivation and rehabilitation would be sufficient to satisfy the demand of eco-produce and meet the capacity for

organizing eco-tours at the site.

49. Dr Angie Ng recognized the importance of engaging in economic activities in order to increase the sustainability of the MA project. She explained that they had engaged the local social enterprise HakkaHome in the marketing and branding of the eco-produce. In addition, with the opening of a new ferry route and a new farmer market at the village, they were optimistic about the results achieved in relation to community engagement and sales of eco-produce. Mr Ken So added that there had been considerable challenges in re-establishing irrigation systems and dealing with the potential health hazards arising from heavy metals in the soil. As such, tests would have to be conducted to ensure food safety of the eco-produce. He further supplemented that ferry services to Lai Chi Wo were provided twice a day and there were about 200 passengers on one trip. Therefore, the number of visitors to Lai Chi Wo was encouraging and they aimed to increase the production of eco-produce in order to better meet the demand.

50. A Member concurred with another Member and asked if the current scale of farmland rehabilitation was already sufficient to achieve the four objectives for the MA project mentioned by the project proponent. She questioned why the project proponent proposed to rehabilitate more fields given the difficulty and time needed, and did not focus on managing existing rehabilitated land instead. In addition, she opined that the sales of eco-produce would not be an issue as the supply of eco-produce would be sufficient to meet the increasing demand of the visitors. Rather, she expressed concern on the issue of heavy metals, in particular arsenic, as this was important to food safety of the public.

51. Dr Ng Cho-nam clarified that during the HSBC project, they had already negotiated leasing all the proposed farmland area from the villagers, and started removing shrubs that had overgrown into the fields. The funding applied under MA scheme would be used on management works of the fields and enhancing the ecological value of the fields. Mr Ken So added that the leased lands were currently managed as wet or dry agriculture fields for the conservation of different target species.

Field management

52. The Chairman enquired about the strategies to manage the agriculture fields in order to increase the fertility of the land and production of crops. In response, Dr Angie Ng explained that wet agriculture fields and wetland habitats were zoned in the west side of the village where water supply was not a constraint, whereas dry fields were zoned in the south side of the village as those areas were limited by the supply of irrigation water. Meanwhile, local farmers allocated their own plots were encouraged to adopt eco-friendly farming practices, and had to submit proposals of their farming activities to the project proponent. Overall, a variety of crops suitable for the seasons, soil and

water conditions of the farmland would be planted in the area to enhance the contribution of the fields to biodiversity.

53. The Chairman suggested that the project proponent should recruit farming experts to help formulate a comprehensive management strategy. He also opined that it was important to grow green manure crops to improve soil fertility and increase crop yield. Mr Ken So assured that experts would be invited to advise on the management of farmland, and that suitable green manure plants would be planted.

54. A Member asked why Lai Chi Wo had been selected as the project site, given its remote location and the fact that there were many other country park enclaves in Hong Kong. In response, Dr Ng Cho-nam explained that Lai Chi Wo village had successfully preserved its rural landscape, rich cultural and historical elements over the years. The project proponent had successfully gained trust of the local villagers and thus considered it a good example for other villages nearby in promoting biodiversity potential through sustainable eco-agricultural activities.

Deliberation

55. Members generally supported the application with the following conditions:

- (a) HKCF should seek the advice of experts with good farming experience to formulate more concrete strategies for rehabilitating and managing the agricultural habitats;
- (b) HKCF is advised to focus on growing high-value crops with longer shelf-life, and explore the possibility of income diversification by producing and selling processed farm products, such as honey, dried vegetables and rosella tea;
- (c) In view of the potential health hazard arising from heavy metals, such as arsenic, in the soil, HKCF should adopt relevant measures to ensure that the food produced is safe and suitable for human consumption; and
- (d) HKCF is advised to explore mechanisms to attract more volunteers to assist in the project implementation, in order to improve the long-term sustainability of the project with regards to staff manpower input, viz hiring of farmers and field staff.

Item 3 : Any Other Business

56. Mr Simon Chan announced that the Government had just launched the first city-level Biodiversity Strategy and Action Plan (BSAP) of Hong Kong earlier that day. An inter-departmental Working Group chaired by the Secretary for the Environment had been set up to co-ordinate the work among government

departments and monitor progress. He also stated that the Government would seek advice from this Sub-committee as regards matters related to the implementation of BSAP which included setting priorities for implementation and advising on technical aspects related to the implementation of specific actions.

57. The Chairman sought clarification on the scope of technical aspects related to the implementation, and expressed concern that not all Members had the professional knowledge required in advising on such technical issues.

58. Mr Simon Chan said the BSAP covered a wide range of cross-cutting issues which require participation and input from various sectors of the community. He considered that Members from this subcommittee represented different sectors of society and would be in a good position to offer their views from different perspectives, which would be important to taking forward initiatives to enhance mainstreaming of biodiversity and community involvement.

59. The Chairman asked if the Subcommittee would be tasked to assess research proposals. In response, Mr Simon Chan said that BSAP involved four key areas of action: enhancement of conservation measures, mainstreaming of biodiversity considerations, increasing knowledge and promoting community involvement. Under the third area on increasing our knowledge on biodiversity, the Government would encourage relevant research and commission studies. AFCD would provide expert advice on technical proposals from biodiversity perspective. Documents and directions would be provided to address the Chairman's concern that not all Members would possess the necessary expertise on studying the research proposals.

60. A Member added that while expert advice from government officials would be considered, it was important to take into account external expertise. As such, she expressed concern on whether Members from NCSC possessed the adequate expertise and experience in this field.

61. A Member opined while experts from the government departments and consultants could advise on the research and technical aspects of the plan, Members could raise questions and give advice in other relevant aspects from the perspectives of stakeholders and general public.

62. A Member noted that new ACE term would begin in 2017 and suggested if co-opted Members from related sectors could be invited under such special circumstances to advise on matters relevant to their interest and expertise.

63. In response to the above comments, Mrs Vicki Kwok pointed out that ACE had comprised members from a wide range of sectors and appreciated the role ACE has played as the Government's principal advisory body on matters

relating to environmental protection and nature conservation. She added that the city-level BSAP was an important policy initiative and therefore the Government hoped to engage NCSC in the implementation process. She undertook to look into ways to provide further support to address members' concerns where appropriate.

64. A Member pointed out that certain consultation bodies might invite co-opted members to participate, such as the Consumer Council, and recalled that advice had been sought in the past as regards co-opting members in the EIA Subcommittee (EIASC). She opined it was too early a stage to confirm if external vetting procedures would be involved in the consideration of research proposals. If the answer was in the negative, she concurred with the Chairman's concern on the lack of experts within the Subcommittee.

65. The Chairman concluded that more flexibility should be allowed in the consultation process with NCSC and to explore the possibility of co-opting external members on a need basis. He suggested that professional advice should be sought and the appointment of new members in the new term could be more diversified with a view to effectively implementing BSAP in the future. He appreciated the efforts of the Government over the years in drawing up and promoting the plan, and expressed hope that optimal results could be achieved in the interest of the community.

66. There was no other business for discussion at the meeting.

**Nature Conservation Subcommittee Secretariat
January 2017**