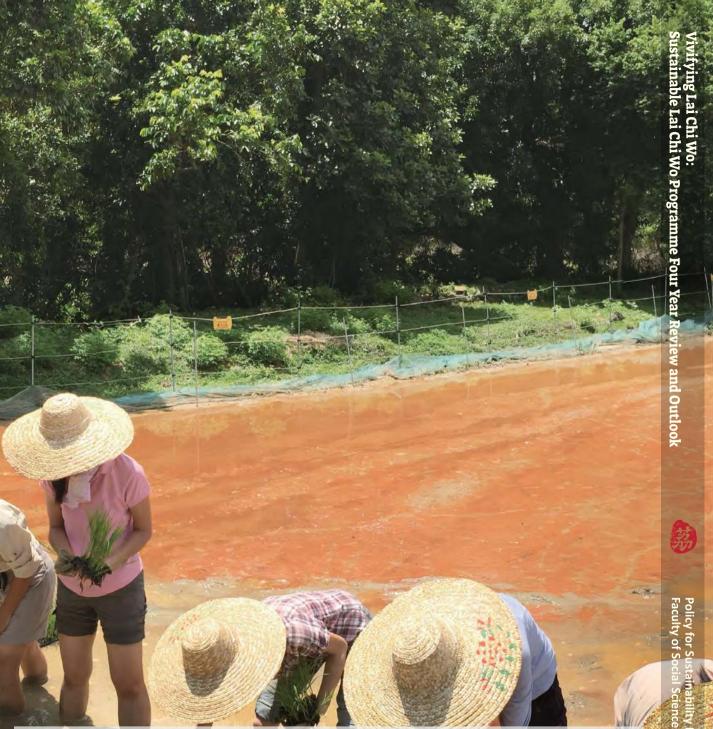
The Sustainable Lai Chi Wo Programme was launched in October 2013. It was a four-year programme led by the Policy for Sustainability Lab (PSL) of the Faculty of Social Sciences at the University of Hong Kong in collaboration with The Hong Kong Countryside Foundation, Produce Green Foundation and The Conservancy Association, and was supported by The Hongkong and Shanghai Banking Corporation Limited (HSBC). The Programme aimed at rejuvenating Lai Chi Wo village and, through which, developing a viable model for rural revitalization grounded upon a sustainability approach. To achieve this goal, the Programme worked on agricultural rehabilitation, community revitalization, education, and research, with a focus on forging social innovation and cross-sectoral collaboration. In the process of implementing these initiatives, the PSL worked closely with villagers of Lai Chi Wo.

The Sustainable Lai Chi Wo Programme was successfully completed in September 2017. Building upon the solid foundation, the PSL has received further support from HSBC to continue its work on Lai Chi Wo. The new phase of the Programme — "HSBC Rural Sustainability" — is a four-year programme from October 2017 to September 2021. It focuses on scaling up the revitalization effort through creating more partnerships, incubating socio-economic models and establishing the Academy for Sustainability in Lai Chi Wo and other villages in Hong Kong.





Sustainable Lai Chi Wo: Living Water & Community Revitalization -An Agricultural-led Action, Engagement and Incubation Programme at Lai Chi Wo http://www.socsc.hku.hk/psl/laichiwo/

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Vivifying Lai Chi Wo

Sustainable Lai Chi Wo Programme Four Year Review and Outlook

Policy for Sustainability Lab Faculty of Social Sciences, The University of Hong Kong



The Faculty of Social Sciences of The University of Hong Kong was established in 1967 and has since undergone rapid expansion and significant transformation. The Faculty consists of Department of Geography, Department of Politics and Public Administration. Department of Psychology, Department of Social Work and Social Administration, Department of Sociology, Journalism and Media Studies Centre as well as six multidisciplinary research centres. The Faculty seeks to contribute to the advancement of society and the development of leaders through a global presence, regional significance and engagement with the rest of China. The Faculty aims to produce citizens with a global perspective who are critical thinkers, socially aware, ready to embrace diversity, and seek to make an impact on society.



The mission of the Policy for Sustainability Lab (PSL) of the Faculty of Social Sciences at The University of Hong Kong is to contribute to the attainment of sustainability through forging evidence-based, innovative solutions to inform policy deliberation and action, to raise people's awareness of the importance of sustainability, to facilitate collective action in and across sectors, and to foster stakeholder engagement. To develop and enhance policy capacity for sustainability, our work focuses on generating and applying knowledge of the five levers of public policy:

- Design of policy instruments
- Public-private collaboration
- Agenda setting and advocacy
- Policy assessment
- Civic engagement



Sustainable Lai Chi Wo

Living Water & Community Revitalization -An Agricultural-led Action, Engagement and Incubation Programme at Lai Chi Wo

This photo story book is part of the Sustainable Lai Chi Wo programme. It is a record of the programme development and participant stories in 2013-2017.

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Foreword I

Foreword II



Hong Kong was popularly known as the "Pearl of the Orient" for its astonishing city view at night and for its round-theclock vibrancy. Beyond the famous Victoria Harbour are the hidden gems in the walled villages, natural coasts, farming landscape and the Fung Shui Woods, where the culture, local wisdom and indigenous fauna and flora can be found. These rich capitals have made Hong Kong unique from the rest of the world.

Hong Kong is one of the very few places in the world that you may escape from the hustle and bustle of the urban areas and dive into the wilderness within just minutes of travelling. As a nature lover myself, on the rare occasions when I have any spare time, I wander into the countryside for the scenery, fresh air and the peace of mind.

Sustainable Lai Chi Wo Programme is one of the University's flagship projects in recent years that integrate research, teaching and knowledge exchange on the issues of sustainable development. With the support from The Hongkong and Shanghai Banking Corporation Limited, the University, through the Faculty of Social Sciences' Policy for Sustainability Lab, initiated the Programme with the aim to contribute to the attainment of sustainability through forging evidence-based innovative solutions to inform policy deliberation and community action towards revitalization models for rural areas.

May I congratulate the colleagues and the community partners for your impactful work over the past four years. This book celebrates not only the successful revitalization of the Lai Chi Wo village, but also the collaborative effort between many sectors of the Hong Kong society in the realisation of an important agenda of sustainable development.

Professor Peter Mathieson

Vice-Chancellor and President The University of Hong Kong (April 2014 - January 2018)



From its foundation in Hong Kong more than 150 years ago, HSBC has remained committed to bringing about allround well-being to the Hong Kong community. We have established a strong reciprocal relationship with Hong Kong people and we have grown and developed together with our society. Through supporting community development, we have actively contributed to the building of a better and sustainable future for Hong Kong.

We are grateful to collaborate with The University of Hong Kong, The Hong Kong Countryside Foundation, Produce Green Foundation, and The Conservancy Association to carry out the Sustainable Lai Chi Wo Programme. It illustrates how we adhere to the idea of sustainable development and are committed to the healthy development of local communities.

Like many nature lovers, I have experienced the village culture and natural landscape of Lai Chi Wo. The Programme puts the concept of sustainable development into practice and brings the sustainable lifestyle to our community, offering other choices for our living.

We are so pleased that the Programme has shown the result of a joint effort between the Lai Chi Wo villagers, academia, the business sector, community organisations, and the wider Hong Kong citizens in contributing to Hong Kong's cultural heritage and nature conservation. It is a big step forward for Hong Kong's sustainable development. With this book, we hope to share with you the story of the Programme's development over the past four years and together, we look to a better future.

> Diana Cesar Chief Executive, Hong Kong, HSBC

The Story Begins

Professor Wai-Fung Lam, Director, Policy for Sustainability Lab and Dr Winnie Law, Associate Director, Policy for Sustainability Lab

Hong Kong is usually regarded as a bustling metropolis with highly developed urban landscapes and vibrant economic activities. What has often been overlooked though, is that over 75 percent of the land in the territory is actually covered by rural areas, including more than 700 indigenous and non-indigenous villages therein. These rural areas and the traditional agricultural village culture are an integral part of the socioecological landscape of Hong Kong, defining the historical and cultural characteristics of the city. In the past decades, however, we have witnessed a rapid decline of the rural areas amid rapid urbanisation. The pre-revitalized Lai Chi Wo is a typical case in point.

The 300-odd-year-old Lai Chi Wo Hakka village is situated in the north-eastern corner of the territory. It is one of the largest remaining traditional Hakka villages in Hong Kong. The village had had a long history of paddy farming but since the 1950s, villagers began to abandon farming and move out to the urban areas or European countries to earn a living. Desertion of the village led to a loss in traditional culture, and changed the natural environment due to a lack of active management. In the late 70s, a substantial part of the surrounding woodland was designated as part of the Plover Cove Country Park. The village was isolated as it was inaccessible by vehicles. With no foreseeable options for the village, the last villager moved out in the 90s.

Rural-urban coexistence is not a new concept. It is commonplace worldwide to find villages located in suburbs, and even nestled in national parks. These villages have retained most of its rural landscape and original layout. Other than engaging in agricultural activities, the locals also provide various tourism activities to visitors, thus introducing new elements to the traditional village economy. This community-based socio-economic transformation has prompted people to re-examine the values of rural communities and our natural landscape. It is therefore crucial that we preserve ecological and cultural assets for society as a whole. More importantly, rural areas offer a wide range of supporting resources for urban development. These include clean air, freshwater, healthy soil, natural buffers against disasters, as well as agriculture, fisheries and timber related ecosystem services. In this sense, urban development is hardly possible without the provisioning services brought by the rural areas. Unfortunately, with the decline of local villages, the concept of rural-urban symbiosis has gradually been ignored by Hong Kong society.

Rural development does not necessarily have to take the form of new town development. In Hong Kong, there are more than 70 pieces of private lands that are adjacent to or surrounded by country parks (known as country park enclaves). As development has long been suspended, most of the villages and farmlands on these

private lands were left derelict. There is great potential for revitalization work to be carried out in these areas. Nevertheless, a consistent challenge for sustainable rural development is how to adapt rural villages to modern societal changes while preserving their ecological and cultural characteristics.

In an effort to find a sustainable way out for rural development, colleagues at The University of Hong Kong teamed up with a group of like-minded people who are concerned about the quality of development of Hong Kong to explore the feasibility of revitalizing Lai Chi Wo. We found that Lai Chi Wo is full of potentials and could be revitalized into a sustainable village: most original inhabitants demonstrate a strong attachment to their motherland and still return to their village with their descendants to pay tributes to their ancestors, to renovate their houses, ancestral halls, and temples, and to keep their village intact. Lai Chi Wo is situated in the Global Geopark, next to the Plover Cove Country Park and Yan Chau Tong Marine Park. It supports diverse habitats including the Lai Chi Wo Beach which is designated as an SSSI (Site of Special Scientific Interest), an Ecologically Important Stream, a large area of Fung Shui woodlands, extensive mangroves, farmlands and wetlands; all these showcase the abundance of natural resources and high ecological significance of the place. Furthermore, land ownership in Lai Chi Wo is relatively unified, which makes it easier to consolidate land resources. Recognising all these attributes, we worked in close collaboration with the local villagers, environmental nonprofits and other stakeholders to launch the "Living Water & Community Revitalization - An Agricultural-led Action, Engagement and Incubation Programme at Lai Chi Wo" (the Sustainable Lai Chi Wo Programme).

The Sustainable Lai Chi Wo Programme is led by the Policy for Sustainability Lab of the Faculty of Social Sciences at The University of Hong Kong, in collaboration with The Hong Kong Countryside Foundation, Produce Green Foundation, The Conservancy Association and local villagers. It is supported by The Hongkong and Shanghai Banking Corporation Limited and endorsed by the Agriculture, Fisheries and Conservation Department of the HKSAR Government. Scholars from the School of Biological Sciences, Department of Geography, and Department of Civil Engineering of The University of Hong Kong have made research contributions to the Programme. The Programme has been working on agricultural rehabilitation, scientific research, education, environmental and cultural conservation and community development. It aims to rebuild the rural community network of Lai Chi Wo, to facilitate a healthy rural-urban interaction, to foster human-nature coexistence and co-prosperity, and to revitalize Lai Chi Wo's rural economy. We have set five major objectives accordingly:

- 1. To initiate a whole catchment management approach for biodiversity conservation;
- 2. To revitalize agricultural activities by adopting innovative farming methods;
- 3. To re-discover the community resources and facilitate appropriate use;
- 4. To develop the village as an environmental and sustainable development education hub;
- 5. To develop diverse local products and services, thereby creating job opportunities and financial returns to sustain the local economy.

The Programme has been implemented for four years. With the concerted efforts of the HKSAR Government, villagers and the programme team, it has now become an exemplar of village revitalization. Not only was it cited as an example of rural conservation in the policy addresses and other long term strategic plans, the agricultural revitalization in Lai Chi Wo also helped Hong Kong make it to the list of top ten Asian destinations for 2016 in the international travel guide book "Lonely Planet". In August 2017, the United Nations Development Programme's Equator Initiative selected the Sustainable Lai Chi Wo Programme as the first and only case from Hong Kong for inclusion into its database which showcases outstanding nature-based solutions to sustainable development undertaken by local communities around the world. We are therefore deeply grateful to all organisations and individuals who supported and participated in the Programme. We are happy to present the revitalization stories of Lai Chi Wo in this book and share our experience and achievements with society.

This book consists of 41 articles and interviews by the programme team, indigenous villagers and new settlers of Lai Chi Wo, relevant departments of the HKSAR Government, and programme contributors, with a collection of photographs (We will acknowledge the photo contributors at the end of the book). The book is organised into four chapters to holistically present the development and stories of the Sustainable Lai Chi Wo Programme in 2013-2017:

Chapter 1: Multifaceted Collaborations

The Sustainable Lai Chi Wo Programme is a cross-sector collaboration initiative. In this chapter, major stakeholders will discuss the methods and challenges of multifaceted collaborations from different perspectives.

Chapter 2: Harmony with Nature

Traditional villages demonstrate the principle of living in harmony with nature. This chapter will tell the story of human-nature integration in Lai Chi Wo from the perspectives of villagers, researchers and educators.

Chapter 3: Restoration of Abandoned Farmland

The revitalization of Lai Chi Wo is driven by the resumption of farming. From stretches of abandoned fields at the beginning of the Programme to the current nine thriving farms, this chapter will highlight both the ups and downs along the way.

Chapter 4: Rural-Urban Interaction

Rural and urban areas together make up the whole of Hong Kong. Rural-urban co-prosperity and co-existence depend on effective symbiotic interaction between the urban and rural populations. This chapter records the stories of villagers and city folk who came to meet, learn from, and interact with one another through the Sustainable Lai Chi Wo Programme. You will see the chemistry of this interaction at work.

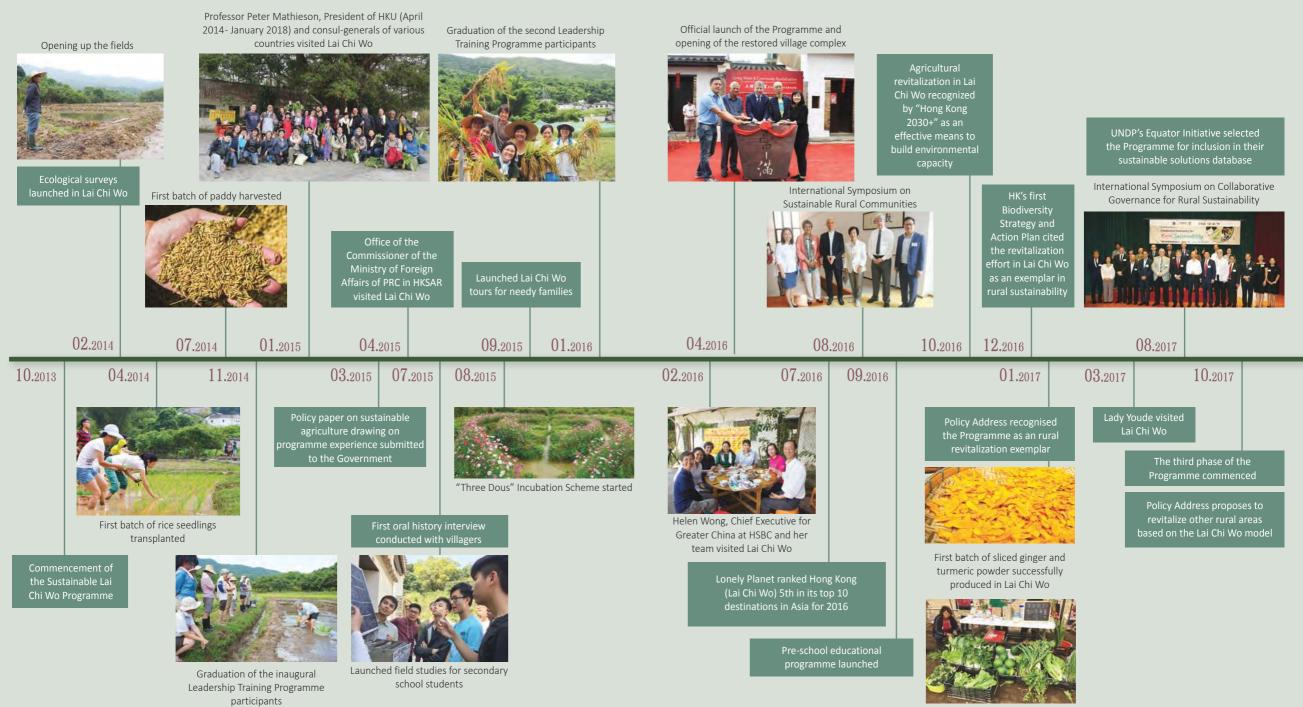
We would like to express our heartfelt gratitude to all the article and photo contributors as well as the interviewees of this book. We hope the concept of sustainable rural development could be widely recognised by different sectors of the community, so that more initiatives of rural revitalization could be promoted and extended to other remote areas based on sustainability principles.

Programme Milestones



Sustainable Lai Chi Wo

Living Water & Community Revitalization -An Agricultural-led Action, Engagement and Incubation Programme at Lai Chi Wo



Lai Chi Wo Farmers' Market established

Multifaceted Collaborations

Multifaceted Collaborations

Dr Winnie Law, Associate Director, Policy for Sustainability Lab

"Sustainable development" is an interdisciplinary, cross-regional and intergenerational concept, hence its implementation relies on multifaceted collaborations. Similarly, the Sustainable Lai Chi Wo Programme also had to be carried out through active collaborations from various stakeholders (including villagers and city folk as well as people of different professions and age groups). The Programme adopted a "University-Government-Community-Business" cross-sector, collaborative approach – The University of Hong Kong took the lead and launched the Programme in partnership with local non-governmental organisations and villagers. The business sector provided suggestions, manpower and funding for the Programme, while the Government provided support in the public domain.

Experience in the past four years told us that successful collaboration is not just about stakeholders finishing their own tasks. What is more important is to have a common vision and to be willing to seek consensus through close communication. That sounds easy enough, but in fact, in a collaborative approach, every stakeholder is a decision-maker (Ansell & Gash, 2007), meaning that everyone is a "boss". Disagreements among them are inevitable and may take time to resolve. Although grounded in mutual trust and shared a common vision, individual parties often start out with disagreements. To reach the same pace with each other through understanding and tolerance, different parties must interact based on an inclusive and flexible collaboration framework. As a collaborative project, the Programme's four participating organisations and villagers share a common vision, but each had different views on the revitalization focus and objectives initially. During the process, many different opinions surfaced within the team, for example, villagers were concerned about the livelihood of indigenous villagers, farmers were concerned about the production size, green groups were concerned about ecological conservation, etc. It was not easy to strike a balance among all these! However, this shows the importance of multifaceted collaborations to sustainable development – making decisions together through multiparty discussions and taking things one step at a time.

Indigenous villagers have long been regarded as a community with relatively strong self-protection awareness, but the Programme has allowed them to cooperate with external organisations and city folk. Newcomers filled the succession gap in the village community by providing resources such as manpower, knowledge and skills to help with the farming rehabilitation and village revitalization. Indigenous villagers accepted their opinions and inputs, and opened up spaces to practise sustainable development together with the newcomers. In this kind of mutually beneficial relationship, newcomers should not make indigenous villagers feel that their rights have been infringed upon and should not cross the line by making decisions for villagers lest they feel disrespected. As an external party, the role of the programme team on many matters should be to give suggestions to villagers or explain to them the situation, so as to help them make informed decisions after assessing the pros and cons. The final decision should be made by the villagers themselves. It would be ideal if the villager





can wisely open its door, let non-villagers become part of the community so that villagers and newcomers can jointly establish a sense of belonging to the village and preserve and further develop its special characteristics.

The Programme tries to nurture a broad community network to participate in the revitalization and sustainable development of Lai Chi Wo – a community composed of local and overseas indigenous villagers, the programme team, new settlers and volunteers to establish mutual trust and a new socio-economic partnership. Furthermore, cross-sector collaborations were developed involving scholars, experts and volunteers for eco-farming, old building rehabilitation and community capital research. The role of the University was to act as a coordinator and supporter to help different stakeholders communicate and cooperate with each other and develop synergies.

Faced with pressing issues of global concern such as climate change and sustainable development, we believe that academia should take up the social responsibility to contribute to the society through on-site actions. As the organiser and manager of the Sustainable Lai Chi Wo Programme, Policy for Sustainability Lab of the Faculty of Social Sciences at The University of Hong Kong had to engage

in internal and external discussions over different issues to establish mutual trust within the team and increase different social sectors' understanding of the Programme. As an academic unit, we possess the prerequisites to be the manager of the Programme, such as our non-profit making nature and our forward-looking vision, as well as public recognition for the University. From the perspective of the University, we believe that academia should act as pioneers of the society and translate sustainable development from theory into reality by means of scientific research, policy advocacy and education.

In our work over the past four years, coordination of different stakeholders was our main responsibility as the manager of the Programme. What was more difficult was persistence in seeking consensus on development and ways to solve problems. We gained practical experience through different communication and discussion approaches, building of trust and insistence on sustainable development, etc. We also believe that the trials and tribulations the Programme went through as well as the ups and downs experienced can become reference points for Hong Kong and other regions in implementing sustainable development.

Reference article

Ansell, C. & Gash, A. (2007). Collaborative governance in theory and practice. *Journal of Administration Research and Theory*. 18, 543-571.



Revitalizing Lai Chi Wo in a "University-Government-Community-Business" cross-sector collaborative approach. From left to right: Diana Cesar, Chief Executive, Hong Kong, HSBC; Kam-Sing Wong, Secretary for the Environment of the HKSAR; Professor Peter Mathieson, Vice-Chancellor and President of The University of Hong Kong (April 2014 – January 2018); and the two village chiefs of Lai Chi Wo, Ah-Chat Tsang and Wai-Yip Tsang.

A Multitude of Collaborative Efforts towards Village Revitalization

Kam-Sing Wong, Secretary for the Environment, HKSAR



Kam-Sing Wong, Secretary for the Environment visited Lai Chi Wo along with Donald Tong, Director of Environmental Protection (second right) and Professor Kin-Che Lam, member of the Advisory Council on the Environment (first right). They took a group photo with Dr Winnie Law of the Policy for Sustainability Lab and Chiu-Ying Lam of The Hong Kong Countryside Foundation in front of the restored village complex.

I started hiking in the countryside and across various villages at a young age. It has been almost forty years since I set out on my first hike to the north-eastern New Territories. The route took me to the old walled village at Lai Chi Wo which was uniquely memorable. It impelled me to revisit the village from time to time in spite of the remoteness. Years after years, flowers bloomed and withered with the passing of seasons, but the ancient village was appearing increasingly empty and forlorn. When could we be expecting its rejuvenation?

Lai Chi Wo is a blessed place situated in the Hong Kong UNESCO Global Geopark and facing the Yan Chau Tong (Double Haven) Marine Park. This walled Hakka village is one of a kind as it embraces the tradition of harmonious integration between human and nature. The place is rich in cultural and ecological resources, including the only White-flowered Derris community in Hong Kong, and the Lai Chi Wo mudflat which is designated as Site of Special Scientific Interest. A few years ago, I came to realise that the re-cultivation work was well anticipated by some villagers and others caring about the sustainability of this village. Will the vision to rejuvenate the Satoyama landscape in Lai Chi Wo be realised after all? Thanks to the devotion of all programme participants, I am gratified to see the steady progress of the Sustainable Lai Chi Wo Programme in the past four years. Local villagers worked in collaboration with The University of Hong Kong, The Hong Kong Countryside Foundation, Produce Green Foundation and The Conservancy Association on the agricultural revitalization and rural community development in Lai Chi Wo. The Programme was gladly endorsed by the Agriculture, Fisheries and Conservation Department in recognition of the conservation value of the village. With the Department's support, a regular Kaito (small ferry) service commenced in early 2016 to facilitate tourists' access to the Lai Chi Wo pier direct. This greatly strengthened the rural-urban connectivity.

As a complementary measure, the Government is putting up a range of ancillary facilities, including a Geoheritage Centre that introduces Hong Kong's geological resources and the Hakka village, as well as the Lai Chi Wo Nature Trail which connects Lai Chi Wo with its shoreline, the walled village, Fung Shui woodland, Coastal Heritiera forest, and areas surrounding the White-flowered Derris community. In early 2017, the Environment and Conservation Fund of the Environmental Protection Department approved funding for The Hong Kong Countryside Foundation and The Conservancy Association to run a Management Agreement Scheme at the village. With the funding support, they will sign management agreements with the landowners and continue to undertake agricultural revitalization and ecological monitoring works in the village.

Rural-urban symbiosis is of profound significance for Hong Kong's sustainable development. To step up our efforts in revitalizing remote rural areas, cross-sector collaboration between villagers and enthusiasts in our city is urgently needed so that we can make a better use of the community knowledge and resources. As mentioned in the 2017 Policy Address, the Government will continue to adopt a diversified and flexible approach in supporting and promoting the rejuvenation of the ecological, cultural and architectural environment in remote rural areas through harnessing community efforts. Moreover, the Government released Hong Kong's first Biodiversity Strategy and Action Plan (2016-21) (BSAP) in December 2016, which covers a series of measures to promote the conservation of rural areas with high ecological value. In this regard, the Sustainable Lai Chi Wo Programme echoes with three of the four action areas as set out in the BSAP, namely enhancing conservation measures, mainstreaming biodiversity and promoting community involvement.

In retrospect of these four years, I am delighted to see that the Sustainable Lai Chi Wo Programme has begun to bear fruitful results, with biodiversity there being enriched. The village made it to the list of the top 10 Asian destinations featured in the travel guidebook "Lonely Planet" in 2016. Recently, I occasionally revisited Lai Chi Wo by sea and it was heartening to see the village increasingly brimming with life under a series of new revitalization initiatives. I hereby would like to extend my sincere gratitude to the village chiefs, villagers, partnering organisations, relevant government departments and all the programme participants who supported the revitalization of Lai Chi Wo on a collaborative basis. Let us keep up our efforts and set a viable model for rural revitalization in Hong Kong.

Efforts to revitalize remote rural areas should not stop at Lai Chi Wo. I hope the Sustainable Lai Chi Wo Programme has set a good example of agricultural revitalization. Together, we can make our much cherished remote rural areas sustainable.

Striving Together with Villagers for Village Revival

Chiu-Ying Lam, Chairman, The Hong Kong Countryside Foundation



Wholehearted communication. From left to right: Lai Chi Wo village chief Wai-Yip Tsang, village elder Uncle On, village chief Ah-Chat Tsang, and Chiu-Ying Lam.

The Hong Kong Countryside Foundation was established in 2011 to enable people keen to conserve the countryside for the long-term benefit of Hong Kong public to jointly make dreams come true by implementing practical local action plans step by step.

After the establishment of the Foundation, we carried out a series of studies and eventually chose to focus our attention on three remote villages in the New Territories: Lai Chi Wo, Tai Long Sai Wan and Sha Lo Tung. Since these villages are different in their historical and geographical contexts, they were followed up in different ways. Among them, achievements are more remarkable in Lai Chi Wo due to favourable timing, geographical and human factors.

A couple of years prior to the establishment of the Foundation, Dr Cho-Nam Ng and I were already thinking about how to transform Lai Chi Wo from a de-populated village into a vibrant farming village with residential population. We have both visited Lai Chi Wo in our teens and still remember its beautiful natural landscape as well as its impressive Hakkastyle architectural cluster. We feel that it would be a huge loss to our society if we let overgrown weeds and bushes take over the abandoned fields and traditional village houses crumble one after another under rain and wind, leaving the village of more than 300 years of history where hundreds of people once lived to be consigned to oblivion. If that happens, future Hongkongers would not know the historical circumstances which brought our early settlers to Hong Kong nor their wisdom of "living near hills, seek nourishment from the hills; living by the seaside, seek nourishment from the sea", that is, getting daily necessities from nature without damaging the harmony with it, thus achieving what is now known as "sustainable development".

In 2009, we got into contact with Yuk-On Tsang, who had been the chairman of Hing Chun Yeuk of which Lai Chi Wo is one of the seven member villages. Mr Tsang is also the village chief of the neighbouring village Mui Tsz Lam. He has been devoted to promoting village revival since his retirement from his educational career. Since we shared the same interest, we got on well immediately. He led us to Lai Chi Wo many times for site visits, which strengthened our appreciation of Lai Chi Wo's natural and cultural environment. Every time we visited Lai Chi Wo, we had to pass through the Sha Tau Kok closed area and take a motor boat to cross the sea. Travelling long distances is indeed time-consuming and tiring, but thanks to the remoteness, Lai Chi Wo has not caught the fascination of property developers and can retain its natural beauty. This is the **geographical advantage** of Lai Chi Wo.

On the abandoned fields, I met villager David Tsang by chance and saw him trying to till the field with a hoe. He had gone abroad to earn a living when he was a teenager. After several decades of life overseas, he wished to return and settle down. But nobody lived in his home village any more. He did try staying overnight back home for a night. Although he enjoyed the tranquillity of his birthplace very much, the feeling of being alone in the whole village was unbearable. Thus returning to live in Lai Chi Wo was not practicable. Nevertheless, he still could not help returning to the village occasionally, going to the fields and tilling the field inch by inch with the belief that small changes could bring a big difference eventually. He said that he had already forgotten the farming techniques, but he dreamt that by the time he passes away Lai Chi Wo could be restored to one third of its former beauty as he saw it when he was young. His deep affection for his home village moved indifferent city folk like us and made us more resolute to do something for Lai Chi Wo.

David's story also reminds us that now is the best time to revitalize the village. Villagers who left the village for a living in the 1960s and 1970s have reached retirement age. Since they spent their teenage in the village, they retain a strong affection for it. If we could rebuild Lai Chi Wo as a habitable village as soon as possible, their dreams of returning to their home village for retirement could be realised, and it would be easier to re-establish a viable residential population. If we delay by a few more years, the village may deteriorate with time. More village houses would collapse, and we will very likely miss the opportunity to revitalize the village. Thus we realised that "now" is the **best time** and the last chance to revitalize the village.

We had no idea how to go about village revitalization at first. But we knew that farming is the basis of Hakka culture; harmony with nature is the immortal wisdom of Hakka villages; and the architectural cluster is a tangible feature of Hakka villages. Therefore, we organised many Lai Chi Wo site visits for scholars, experts and non-governmental organisations, volunteers, etc. Subjects covered include agriculture, architecture, history, geography, culture, ecology, education, planning and sustainable development. The purposes of such visits were to gradually promote the concept of Lai Chi Wo revitalization to the society and at the same time, through interdisciplinary exchanges, to understand from multiple perspectives what have to be considered and taken care of in revitalizing Lai Chi Wo.

Apart from site visits, we also organised meetings to expand our contact with villagers, hoping that this could progressively build up communication and mutual trust with villagers. We were fortunate in getting along well with the two village chiefs of Lai Chi Wo, viz. Wai-



Villagers used to dredge and clear the stream together every year. The first mission of village revitalization is to restore such kind of social customs and encourage more city folk to take part in them.

Yip Tsang and Ah-Chat Tsang. By explaining our ideas to them repeatedly, we successfully convinced them that we were genuinely sincere in our effort to build a future for Lai Chi Wo without any hidden vested interest. Villagers in return impressed us with their fervent sentiments about the village. We learnt to appreciate the close link between Man and Earth and to understand that the so-called "xenophobia" of villagers in the eyes of city folk was a reflection of unity among villagers as well as their affection for home village. Without such strong affection, the village houses of Lai Chi Wo would not have been maintained well through the years and would have all collapsed a long time ago. The unique situation of "people absent but houses present" at Lai Chi Wo constituted an incomparable positive **human factor**.

Since The Hong Kong Countryside Foundation was founded in 2011, we introduced Lai Chi Wo to various sectors of the society, established relationship with many parties and expanded our contact network to nurture societal support for our plan that was yet to take shape. By 2012, we started to think about models of village revitalization and organised a seminar in which speakers talked about similar village programmes abroad. Surprisingly, around 30 to 40 people showed up. Even the two village chiefs and several village elders of Lai Chi Wo came all the way to the city to listen to the talks. We felt very excited and we saw a beam of hope.

In 2013, The Hong Kong and Shanghai Banking Corporation Limited decided to support the Sustainable Lai Chi Wo Programme of The University of Hong Kong, which was initially led by Dr Sarah Liao and subsequently by Professor Wai-Fung Lam, to kick start the revitalization of Lai Chi Wo in an interdisciplinary and multi-organisational collaborative approach. The resumption of farming constituted the starting point of the revitalization, complemented by a range of diversified activities. The Programme sought to bring life to Lai Chi Wo and to wake the farming village that has lain dormant for three to four decades. As one of the partnering organisations, the major roles of The Hong Kong Countryside Foundation were to communicate with villagers, encourage Lai Chi Wo indigenous villagers to support and participate in the Programme, and lease fields from villagers for farming rehabilitation, as the material foundation for the launch of the Programme.

The Hong Kong Countryside Foundation hereby reiterates that we will continue cooperating with villagers of Lai Chi Wo and working for the betterment of Lai Chi Wo through diversified means.

Farming is the foundation of Hakka culture; harmony with nature is an immortal wisdom of Hakka villages; and the layout of architectural clusters is a tangible feature of Hakka villages.



Building Mutual Trust through Collaborations with Indigenous Villagers

Dr Cho-Nam Ng, Department of Geography, The University of Hong Kong



Dr Cho-Nam Ng (left) and Dr Ji Chen (right) of the Department of Civil Engineering, The University of Hong Kong, are introducing the geographical and hydrological conditions of Lai Chi Wo.

If we want rural conservation to be effective, we should not be too critical of the villagers or demand the Government to restrict them through means like planning control. Not only is this ineffective, but this would also bring about conflicts. Both parties would end up losing.

In Hong Kong, the value of rural life has always been underappreciated and villages being abandoned as people move to urban areas. Well-preserved villages like Lai Chi Wo are very rare now, so if we are to find a site in Hong Kong with revitalization potential, Lai Chi Wo is definitely the best option as the landscape there is relatively untouched. If efforts are not made to preserve Lai Chi Wo, the value it represents would also disappear. Conservation of rural areas starts with a thorough understanding of the ecological, historical, cultural, environmental, geological, and agricultural significance of these rural areas, then we can promote public awareness on this issue. If the society appreciates and cherishes the rural countryside, then there is more impetus for the Government to allocate resources in rural conservation.

In 2010, Mui Tsz Lam village chief, Yuk-On Tsang, showed me the Tai Ping Ching Chiu Festival in Lai Chi Wo organised by the Hing Chun Yeuk villagers. The villagers' strong sentiments towards their village and traditional customs were palpable. Without such feelings and ties to the village, Lai Chi Wo would very likely have been redeveloped into modern small houses or deteriorated, or evolved from an indigenous settlement to a place mostly inhabited by non-indigenous villagers like some villages in Sai Kung. Lai Chi Wo villagers are relatively more conservative and believe in traditional concepts such as "Fung Shui", thus they have kept the village layout intact and have not built houses outside the village walls, preserving the village landscape.

However, being conservative can sometimes hinder a village's revitalization. To counter that, a wellthought-out process to smoothen the transition is needed. Traditions have to be recorded because they are a part of history, and more so because the next generation is unlikely to practise them anymore. Apart from keeping records, we should also identify traditional customs that are worth preserving. If they are lost or on the verge of disappearing, we should revive them. For example, the programme team reintroduced paddy farming in the village, encouraged villagers to organise the Hing Chun Yeuk Chinese New Year banquet and revived festivals such as the celebration of the Birthday of Kwan Tai. The better the village is preserved, the stronger the villagers' ties to their village will be. On the other hand, traditional conventions that do not fit the modern circumstances should be allowed time to change slowly. For example, outsiders had not lived in the village of Lai Chi Wo for the past few hundred years, but now villagers are increasingly more willing to work with newcomers, even leasing out their village houses to participants of the Sustainable Lai Chi Wo Programme. This could only be achieved through a diplomatic approach adopted by the programme team.

In addition, if we want rural conservation to be effective, we should not be too critical of the villagers or demand the Government to restrict them through means like planning control. Not only is this ineffective, but this would also bring about conflicts. Both parties would end up losing, which is also how the discontent of indigenous villagers towards environmental organisations have accumulated. The revitalization of Lai Chi Wo demonstrates another approach. It started with conversations with a few villagers. Chiu-Ying Lam and I had both shared an interest in revitalizing Lai Chi Wo so we visited the village, hoping to meet some of the residents. With an introduction by village chief Yuk-On Tsang, we got to know fellow resident David Tsang, who had returned to the village to resume farming. This very quickly expanded to discussions with other villagers. Later, we became acquainted with two village chiefs and some villagers of Lai Chi Wo through workshops and seminars, and gradually established mutual trust and collaborations. It is not easy for conventional environmental organisations to emulate our success because when they approach villagers as organisations, the villagers would usually respond as a group too as both parties would have their stances and representatives. Conversations may be polite, but it would be difficult to build trust and a close relationship, making it hard to get things done. The Hong Kong Countryside Foundation's members consist of not only conservationists, but also lawyers and Heung Yee Kuk members, etc., resulting in a very special network of people who helped push along collaboration efforts with villagers.

Revitalizing Lai Chi Wo is definitely not an easy job and we are still facing big challenges until now. Firstly, as there is an increasing number of newcomers involved in activities at the village and some have even settled down there, this has led to friction between the villagers, the clans and the newcomers. For example, some villagers worry that non-indigenous villagers would want to run for election as village chiefs. Ideally, the villages should open up moderately to new settlers while at the same time preserve and further develop their special characteristics. Secondly, since most villagers moved abroad years ago in search for a better life, participation of local residents is limited, especially the younger generations. As for young villagers who live in Hong Kong, chances of meeting them are not very high, so it is not easy to get them to participate either. It is also impossible to expect them to guit their own job to help with their village's revitalization. However, in the long run, we must increase the locals' participation in revitalizing Lai Chi Wo. Thirdly, village revitalization efforts are faced with a number of governmental restrictions. Not only must land use comply with the Town Planning Ordinance, villagers hoping to operate homestays also need to adhere to fire safety regulations, and basic infrastructure such as sewage treatment facilities is still lacking in the village. Furthermore, the decision-making procedures at the village are still undefined. A trusted and practical mechanism needs to be established in order to handle the everyday problems. Ideally, there should be a mechanism to collect the thoughts of all villagers, reach a consensus and then make decisions that protect the interests of different parties.

Firm Action with Patience; Consensus on Urban and Rural Development

An Interview with Lai Chi Wo Village Chiefs Ah-Chat Tsang and Wai-Yip Tsang

Before this, we never thought that Lai Chi Wo could be revitalized, nor did we imagine we would come across such an opportunity.

Ah-Chat Tsang and Wai-Yip Tsang have been the village chiefs of Lai Chi Wo since 2011. They are the most important facilitators of the Programme, and have witnessed the farming rehabilitation and village revitalization in Lai Chi Wo.

Indigenous villagers of the New Territories refer to villagers who lived in the New Territories when it was leased to Great Britain in 1898, as well as their offspring. It is an identity created during the colonial period and most Hong Kong people view indigenous villagers as a group with special identity and rights. That said, indigenous villagers have long felt that these traditional rights have been infringed upon, and have even lodged multiple litigations against the Government to protect their rights. Thus, misunderstandings and conflicts seem to exist between city folk and indigenous villagers. When these two groups of people collaborate with each other, how did the village chiefs resolve rural-urban conflicts and accept external parties' assistance to facilitate the sustainable development of Lai Chi Wo? Was it a smooth process?

"Of course the villagers had divided opinions about the farming rehabilitation and village revitalization programme. Most of the partnering organisations involved in the Programme have an environmental protection background. Some villagers were hence worried that these groups would prevent them from constructing small houses, which is a right of the indigenous villagers. However, Lai Chi Wo is very remote, so we don't think building small houses in the village will be a profitable endeavour in the coming 20 to 30 years. It is not economically sound because it costs millions to build a small house which is unlikely to be rented out. We and our village brothers who support the Programme thought that instead of leaving the old village houses to rot, we should let interested organisations help to improve the village. This can attract city folk who enjoy Lai Chi Wo's serene environment to rent our old houses and farmlands and develop the local tourism industry. This is more beneficial to the entire village."

"Most villagers who care about Lai Chi Wo were born and raised here. This place carries fond memories from their youth. Even if they have moved overseas, their hearts are still with their home village. They would still renovate the ancestral halls, temples and village walls in order to maintain Lai Chi Wo's landscape."

In 2012, the two Lai Chi Wo village chiefs, along with Mui Tsz Lam village chief Yuk-On Tsang and Lai Chi Wo villagers Simon Tsang (Uncle Simon) and David Tsang took part in the Lai Chi Wo revitalization forum organised by Chiu-Ying Lam at Hong Kong Scout Centre. They took in opinions from many passionate citizens who had participated in village revitalization programmes abroad, and were surprised to see many people interested in helping to revive Lai Chi Wo. "After the forum, Mr Lam asked us if farming rehabilitation and village revitalization can be carried out in Lai Chi Wo. We thought it was a good idea to let others help



enhance the village environment and keep the village tidy. After some preliminary discussions, we began conducting farmland searches. Three village elders Keung-Ying Wong, Hing-Wai Tsang and Ah-Chat Tsang were extremely helpful in this aspect." Receiving support from open-minded and enthusiastic village elders was crucial for indigenous villagers to revive the village. "Support from landowners was important too, as we needed land to farm on and houses to live in. Uncle Simon has more land, so his support was critical. Farming rehabilitation began from the West Gate and he was willing to provide his farmlands there rent-free as he hopes these lands could be rehabilitated to help rejuvenate Lai Chi Wo."

During the Programme, the long-requested Kaito (small ferry) service connecting Lai Chi Wo and Ma Liu Shui finally commenced on January 1, 2016.

"We brothers have never doubted the sincerity of the organisations involved in the Programme, but naturally there were villagers who were sceptical and raised their concerns to us. For instance, some suspected Chiu-Ying Lam was sent by the Government to obtain land from villagers to expand the conservation areas. When dealing with disagreement among villagers, we found it necessary to provide more explanations and more importantly, to gain the trust of villagers by taking substantial actions with patience so that they could see the fruits of our efforts." Village chiefs said they would listen to villagers' different opinions regarding the Programme, and mutual respect is the key.



Villagers, new settlers, the programme team and volunteers travelled together to Yim Tin Tsai in Sai Kung for a site visit. "Even environmentalists are open to negotiations. What is most important is that both sides are willing to communicate openly and respect each other's views. Villagers don't know much about ecological conservation, so we welcome environmentalists' guidance and are willing to listen to their suggestions. The Sustainable Lai Chi Wo Programme, Chiu-Ying Lam and Dr Cho-Nam Ng are the bridges between villagers and environmental groups, facilitating our communication and trust building." After the Programme was launched, it drew support from many hesitant villagers, and negative views of the Programme gradually dissipated.

The village chiefs observed that the Programme has helped strengthen bondings among villagers. "Information technology nowadays is advanced, so villagers

have also created a WhatsApp group with nearly two hundred members. Many overseas villagers can then get the latest updates about the village quickly. With the Programme, the village is no longer deserted, and the Programme helped attract villagers to come back. Indeed, we've seen villagers returning to the village a lot more often in recent years. In the past, villagers seldom came back, and when they did, most of them left in a hurry after joining traditional rituals. Now, every year, many villagers come to clean the village and clear the weeds. They like spending more time here and taking part in village affairs."

After the Programme was launched, the workload in managing the village became heavier, leading to the establishment of the Lai Chi Wo Pui Shing Tong Committee. "Lai Chi Wo didn't have a village committee initially. The newly established Pui Shing Tong

is composed of villagers from the Tsang and Wong clans and has successfully united villagers in navigating village affairs. The committee is now registered as a society under the Societies Ordinance. Furthermore, the village has recently established the HakkaHome-LCW social enterprise. HakkaHome-LCW is applying for registration as a charity and it aims to promote the sustainable development of Lai Chi Wo, creating job opportunities for villagers and preserving the village houses and culture. It recently collaborated with The Hong Kong Countryside Foundation to launch the Hakka Life Experience Village@Lai Chi Wo project."

For centuries, only the Tsang and Wong clans have inhabited Lai Chi Wo. Since the revitalization started, many outsiders have begun working and even living in the village. Does this worry the villagers? "Having outsiders here is a good thing, as it has brought liveliness to the village. The increase in the number of settlers has motivated indigenous villagers to return to the village more frequently. One after another we are seeing more owners willing to spend money on renovating their houses. Even the illegal immigrants and loggers don't dare to enter the village now." "We aren't too worried that the newcomers will clash with villagers. After all, they came here because they like our environment, culture and our good traditions." The Programme has influenced the neighbouring villages as well with rebuilding efforts happening in Kop Tong and Mui Tsz Lam. In Mui Tsz Lam, villagers are even planting trees, and have successfully fought for the reconnection of power supply.

"We welcome those who sincerely like Lai Chi Wo and our culture to move here. We hope outsiders can keep Lai Chi Wo clean, and will not encroach on indigenous villagers' livelihood and rights. It is reasonable for non-indigenous inhabitants to farm and sell products produced from their crops, but if they do similar business as the indigenous villagers resulting in vicious competition, it may threaten the livelihood of indigenous villagers. If this kind of situation arises, both parties should negotiate peacefully to avoid conflicts."

Are villagers concerned that non-indigenous residents might run for village chief election in the future? "Haha, we've thought about it, but it seems like the non-indigenous residents now are not too interested in that. If it really happens in the future, we still have countermeasures!"

Rather, the village chiefs are more worried that villagers may sell their village houses and lands to outsiders of Hing Chun Yeuk in the future. "This has not happened yet, because this generation of villagers grew up here and have strong sentiments towards the village. They are now well off and will likely keep their inherited ancestral houses. It is harder to say what the next generation will do. If they really want to sell their houses, we will try our best to persuade them to sell them to the indigenous villagers of Lai Chi Wo or people of Hing Chun Yeuk."

"We really want to grasp this opportunity to revitalize Lai Chi Wo, so that the next generation will have a sense of belonging when they return. Some younger villagers study relevant disciplines and are interested in traditional villages. We hope they will return to Hong Kong to take over village affairs. We are not pessimistic about the future of Lai Chi Wo."



We aren't too worried that the new comers will clash with villagers. After all, they came here because they like our environment, culture and our good traditions.

Passing the Torch of Promoting Sustainable Development to Future Generations

The Hongkong and Shanghai Banking Corporation Limited



Apart from supporting community projects, our staff members are also active in various kinds of voluntary work. HSBC started the Sustainable Lai Chi Wo Programme with The University of Hong Kong in 2013 and has supported the Programme ever since.

We find the paddy farming rehabilitation in Lai Chi Wo very meaningful and it exactly represents the spirit of HSBC. Paddy farming is not only part of Hong Kong's traditional culture but rice is also an internationally traded commodity. In 2015, to mark HSBC's 150th anniversary in Hong Kong, we erected two bronze sculptures, each representing a single grain of rice, at the Bank's head offices in Hong Kong and the UK, respectively. A single grain of rice is too small to be traded – it takes many of them together to become valuable.

Sustainability underpins our global strategic priorities. Apart from supporting community projects, our staff members are also active in various kinds of voluntary work. We fundamentally believe that sustainable development requires us to care for society, the environment, and the economy at the same time. For a corporation to maintain long-term prosperity, it must build a mutually trusting relationship with its clients and the community at large. Trust is built upon many foundations, one of which is to let stakeholders understand our determination to promote the long-term sustainable development of our society.

The Sustainable Lai Chi Wo Programme has provided us with a good opportunity to conserve Hong Kong's cultural heritage, ecological environment, and local community through cross-sectoral collaboration. Revitalizing this important natural and cultural heritage is also a strong way to show our long-term commitment to Hong Kong's sustainable development.

The Sustainable Lai Chi Wo Programme is a model for sustaining the traditional culture of Hong Kong. Lai Chi Wo has grown from having a strong neighbourhood spirit for paddy farming in the old days to today's cross-sectoral collective effort for revitalization. We are proud of HSBC's role in the history of Hong Kong and in this revitalization programme.

We have actively supported the Sustainable Lai Chi Wo Programme to replant the paddy fields and rebuild the previous community environment. It is an important step towards wider revitalization of Hong Kong's rural areas and the promotion of rural-based socio-economic models. The Programme corroborates our confidence about the future with a long-term vision. We will continue to put sustainable development into practice and we also wish that future generations will inherit and pass on the mission and vision we had for the Sustainable Lai Chi Wo Programme.



HSBC volunteers have repeatedly helped with taking photos and producing videos for the Sustainable Lai Chi Wo Programme.

Old Buildings with a New Lease on Life

The Policy for Sustainability Lab of the Faculty of Social Sciences at The University of Hong Kong commissioned The Centre for Architectural Heritage Research of The Chinese University of Hong Kong and engaged builders with traditional craftsmanship to restore a row of dilapidated old village houses at the entrance of the village. They adopted traditional Hakka construction techniques and made use of locally-sourced materials such as sand, mud, straw and oyster shells. Villagers and volunteers dedicated to giving the old buildings a new lease on life pitched in to reconstruct the buildings. The complex, officially named the "Lai Chi Wo Cultural Hub" is now used for community activities, gatherings and training purposes.







Harmony with Nature

Harmony with Nature

Katie Chick, Project Manager, Policy for Sustainability Lab

In the past few decades, the society generally considered farming villages backward in lifestyle and inefficient in productivity. Rapid urbanisation and modernisation have brought about a highly efficient lifestyle, but at the expense of nature and health, posing more and greater threats to human survival. Looking back, there is a realisation that the routine typical of village life is in its own way an ode to the rhythm of nature – a kind of lifestyle that adapts to and is in harmony with the environment.

Half a century ago, most land in Hong Kong was farmland and the majority of the population worked as farmers. "Work starts with the rising of the sun, and break as the sun sets", village life emphasises care for the environment as villagers rely on the surrounding nature and resources for all aspects of life. They lead a life that is close to nature and they have a set of values and philosophies which is very different from that of modern city folk: a kind of lifestyle that complements nature and stresses equilibrium and sustainability instead of binary thinking where nature is a separate entity. Take the environmental design of Fung Shui villages as an example: the ancestors of villagers would observe the topography, wind direction, water flow and sun angles to select suitable sites for building villages, then they would make use of plants (Fung Shui bamboos, Fung Shui trees, Fung Shui woodland) to improve the environment. The terraced paddy fields and irrigation system of villages located in hilly areas are the results of the adaptive work carried out by villagers in the past. One's subsistence is dependent on the surroundings. be it on a hill or near the water - from food, medicinal herbs, dyes to construction materials, villagers collected them locally and made different use of available natural resources. Villages are actually examples of human-nature symbiosis. In contrast, city folk appear ignorant in their naivety about the natural environment.

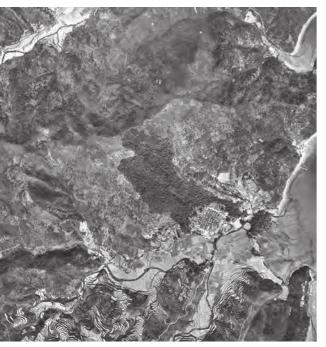
In recent years, countries around the world have started to again reflect on the contribution of traditional agricultural villages towards the whole society's development, and conducted research into traditional agricultural management models, utilisation of natural resources and crafts, etc. It is found that villages in the past practised sustainable management philosophies ahead of its time, and the knowledge villagers possessed reflected a deep understanding towards the natural ecosystem. Their wisdom gave us important clues in solving present conflicts between development and the environment. However, times have changed and villages nowadays can no longer just aim for selfsufficiency and be an independent system isolated from the outside world. Villages have become an integral part of urban areas and they are facing different new challenges as well, such as population explosion, climate change, globalisation, pollution, extinction of species, etc. In a globalised world, conservation and promotion of traditional villages is now a new trend. The international community has proposed the concept that traditional farming landscapes are cultural landscapes. Many organisations launched programmes such as the "Satoyama Initiative" and "Globally Important Agricultural Heritage Systems" to promote the conservation of traditional farming landscapes and to revitalize traditional farming villages to adapt to modern demands. In addition, due to the development of organic and eco-farming, international agricultural organisations and ecological conservation organisations have also collaborated to promote the multi-functionality of agriculture which includes not only food supply but also the provision of various ecological services such as carbon sequestration, water conservation, creating habitats for wildlife and enriching eco-tourism resources. These strategies all help to promote the value of rural conservation and global sustainable development.

Therefore, the Sustainable Lai Chi Wo Programme does not only aim to revitalize one village alone, but we also hope to use Lai Chi Wo as a starting point – through revitalization of this village, we are facilitating the local society in rethinking the binary opposition between development and nature and to learn from village life the wisdom of living in harmony with nature. We are promoting at societal, organisational and personal levels an attitude of living which integrates with the local natural environment.



Teaming Up with Nature

Memories of Lai Chi Wo Villagers



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This is an aerial photograph of Lai Chi Wo taken in 1963. Villagers aged over 60 looked at Lai Chi Wo from a completely new angle and reminisced about agricultural village life in the past, which is also a common memory of other elderly indigenous villagers in Hong Kong. Time has wrought changes to the village and villagers' memories of these are bittersweet. The Policy for Sustainability Lab recruited city folk to help with the Lai Chi Wo oral history collection and invited historian Dr Kelvin Chow to provide the training required. Villagers' stories elevated our appreciation of the village community intelligence in the old time.

Hakka people are often praised for their willingness to work hard but we often forget it goes hand-in-hand with their living circumstances. People nowadays gasp at the beauty of terraced fields and the perseverance of forefathers, but the terraces were actually a development project necessitated by the shortage of land suitable for farming. During the early Qing Dynasty, the Qing Court issued an evacuation order in 1662 to coastal residents in order to cut off the support for Koxinga (Zheng Chenggong 鄭成功) in Taiwan. The evacuation order was rescinded in 1669 and the Qing Court encouraged people to resettle along the coast and cultivate lands for farming. As a result, a large number of "new migrants" moved to Hong Kong and they are known as the "Hakkas". As the Hakka people moved to Hong Kong relatively late, they could only settle in hilly regions where environmental resources were more inferior. Due to the lack of flatland, the Hakka ancestors had to carve terraced paddy fields from the hills and divert freshwater from upper streams to the fields. Paddy farming villages in China is concentrated in the warm and humid South China region. Before the Second World War, almost all local villagers made a living through paddy farming and Lai Chi Wo was no exception. In the past, villagers of Lai Chi Wo grew the first crop of paddy in March, second crop of paddy in June, and sweet potatoes, taros and potatoes in October and November. They farmed

The terraced fields were everywhere and they extended to the middle of the hills. Every household grew paddy and everyone in the family, young and old, had to take part. Families also reared cattle for farming. Adults drove the cattle in the fields whereas children herded the cattle to pasture. Farm work also includes weeding, transplanting of rice seedlings, shovelling the seedlings, harvesting the grains and even scrambling for cow dung as fertiliser! The sweet potatoes would be dug out in March and kiln-baked on the harvested paddy fields with straw, resulting in delicious sweet potatoes. Families raised pigs, chickens and ducks as well. Most households had their own pig sheds and raised their pigs by feeding them leftovers, sweet potato leaves and duckweed from mud ponds. The pigs were for sale and people would come to collect them by boat. Chickens and ducks were usually reserved for self-consumption, especially during festivals. They were sold only when there was surplus stock.

Village chief Ah-Chat Tsang

mainly for subsistence and sold produce only when there was surplus. Terraced fields on hills tend to have lower productivity and climbing up and down the hills was also exhausting. In addition, villagers also built a dam to support their farming activities. After centuries of hard work, villagers could finally call Lai Chi Wo home.

The large forests surrounding Lai Chi Wo can store a huge amount of rainwater and slowly release it to the Lai Chi Wo catchment, providing abundant domestic and agricultural water supply for Lai Chi Wo. There are a few old wells in Lai Chi Wo from which villagers prior to the 60s would draw water for drinking. They carried the water back home and stored it in the water tank which could be found at every home then. In the 60s, with donations from the Kadoorie Agricultural Aid Association, villagers built a reservoir on the hills by themselves and installed water pipes to connect it to village houses. Since then, villagers have switched to drinking water from the hills instead. There is a stream that flows all year-round, providing farmlands with water vital for irrigation. Lai Chi Wo experienced the highest population numbers from the 50s to 60s. There were farms everywhere and the terraced fields extended to the middle of the hills, mainly growing paddy. Villagers dug channels next to the fields, so when water flowed downward from the top, the upper fields were irrigated first, and the lower ones later. When irrigation water did not come in time, farmers had to think of other ways to irrigate their farms, for example, through manual watering and opening up additional water outlets. Moreover, villagers in the past would clear the river channels to prevent silting and flooding.

Fung Shui Lai Chi Wo is backed by hills while facing the sea. A stream cuts through the village and there is a large piece of Fung Shui woodland on the slope behind the village. Among the over 110 Fung Shui woodlands in Hong Kong, the one





in Lai Chi Wo is quite large, with an area of around 5.7ha. Villagers possess strong awareness in protecting natural resources and the environment around the village. Destruction of the Fung Shui woodland is prohibited. Villagers strictly observe this rule because of "Fung Shui" reasons and only cut firewood from hills outside the Fung Shui woodland area. Protected by villagers throughout generations, some large old trees have managed to survive in the Lai Chi Wo Fung Shui woodland. Among them, the Five-fingered Camphor, a Banyan Tree with an altar to worship the Earth God, and two old Autumn Maple trees have been listed in the Register of Old and Valuable Trees. Villagers from the older generation in Lai Chi Wo still remember how the Five-fingered Camphor was protected during the Second World War. Apart from banning the logging of the forest, villagers also protected the Coastal Heritiera and White-flowered Derris community at the estuary in front of the village as they protect the village from being washed away by the wind and sea. Today, this piece of woodland has become the one and only estuary Fung Shui woodland in Hong Kong.

Many villagers planted a variety of crops such as tangerines, plums, pineapples, guavas, pomelos and bamboos at the edge of the Fung Shui woodland. Older villagers even knew how to weave bamboo products. In the 60s and 70s, almost every household in Lai Chi Wo grew tangerines as they are fruitful even without much care. As Chinese emphasise blessings in Chinese New Year and there were no imports of tangerines from the Mainland at that time, Lai Chi Wo tangerines were sold very well at good prices in Sha Tau Kok. But later on, the import of agricultural produce from the Mainland increased, causing prices of locally grown produce to be less competitive, villagers gradually moved away and the orchards were abandoned.

Let the Hills Feed You All villagers had a certain level of understanding of the plants in their surroundings. Older villagers said that there were lots of Rose Myrtle on the hills bearing edible fruits from July to September and they could eat the fruits of Autumn Maple in October. They also know that eating Lingnan Garcinia causes yellowing of teeth. Near Lai Chi Wo, there is a kind of poisonous plant called Graceful Jesamine which produces yellow flowers in June and July. Older villagers can distinguish it from other plants. Villagers used to cut firewood for fuel on nearby hills outside the Fung Shui woodland area. There were many pine trees on the hills and they were suitable for use as fuel as they burn longer. Every household at that time had applied to the Government for a "Foresting Lot Licence" and they cut firewood from different areas in the hills. Female villagers also stocked grass from hills as backup fuel behind the village.

Villages lacked medical supplies in the past, so some elderly women gradually learnt to identify medicinal herbs. When villagers had minor illnesses, they would seek help from these ladies. These women would then pick medicinal herbs to make medicinal liquor to cure fellow villagers. Some villagers also picked medicinal herbs and sold them to herbal medicine shops elsewhere to earn extra income.

Villagers of Lai Chi Wo made use of the surrounding plants to make Hakka snacks and drinks. The women of Lai Chi Wo picked Chinese Fevervine around Ching Ming Festival, ground their leaves into powder and mixed it with glutinous rice flour and rice flour, and then added stuffing such as peanuts and sugar to make Chinese Fevervine Hakka Cha Kwo(茶粿-steamed sticky rice dumplings). Eating them is good for removing Wind, increasing blood circulation, removing Heat and detoxifying the body. They also made Ramie Cha Kwo with Ramie leaves and Mugwort Cha Kwo with Mugwort leaves. Villagers even used the leaves of certain trees (for example Yellow Basket-willow) found on nearby slopes to make Hakka sweet tea. Since the leaves are sweet, they can be used to make sweet tea without additional sugars.

In the past, Lai Chi Wo villagers knew how to dye fabrics and make toys from plants. According to an old villager, after paddy harvesting in October, some women would scrape the root of Rose Myrtle, then soak it to make a dark-coloured dye to brighten faded clothes. Villagers also grew a kind of shrub called Ramie. Village women would soak Ramie leaves and beat them into a sticky pulp. In doing so, a blue colour was produced and used



When we felt slightly unwell due to minor illnesses, we would take homemade herbal medicine made by the village grannies from their handpicked herbs. The medicine usually worked quite well for minor ailments.

Villager Yin-Ying Tsang

My father used to ask me to weed the orchard and taught me how grafting is done on tangerine trees. We had longan, lychee and plum trees in our orchard. When all the plum trees were blossoming, it was stunningly beautiful! The whole orchard was filled with beautiful snow white plum blossoms. We also grew persimmons and tangerines. The end of each year was the happiest time for us, because we could pick the Chinese New Year tangerines to sell and get a good income. That's why we always had a good time during Chinese New Year.

Villager Hon-Man Tsang



for cloth-dyeing. Village children in the past used the wood of Yellow Cow Wood and Autumn Maple to make spinning tops. They would spin them on stony ground to see who could spin the tops the longest.

Not only did the villagers understand the plants well, they also lived next to wild animals – snakes, rats and insects are common. Villagers said they have seen Burmese pythons and venomous snakes such as the Bamboo Snake, Chinese Cobra and King Cobra in Lai Chi Wo. Wild mammals like the wild boar, Chinese porcupines and Red Muntjac appear in the village as well and villagers in the past usually hunted these animals for food in the winter. They would also climb trees at the edge of the Fung Shui woodland to catch birds as pets. They made bird cages and raised birds like Crested Myna, Chinese Thrush and Japanese White-eye at home, fed them with Water Skaters and listened to their singing. If they caught Crested Myna, villagers would even teach them to speak.

When I was young, I asked older playmates to help make spinning tops. Wood from some plants is especially fragrant, and tops made from different types of wood sound differently... After shaping the top, we stuck an iron nail into it, coiled a rope around it and threw it out.

Villager Wai-Ching Wong

Village children would catch a type of jumping spider which belongs to the genus Thiania, fold Screw Pine leaves into boxes and put the jumping spiders into the box to see whose jumping spider was better at fighting. There were also voles and Chinese Bullfrogs in the village. Some villagers who recently came back to Lai Chi Wo said that the sounds of the Chinese Bullfrog at night were exceptionally familiar and they felt absolutely at home.

Let the Waters Nourish You Villagers formerly lived off surrounding resources. Apart from farming, old villagers said that in their fathers' and grandfathers' generations, a number of farmers would go fishing in the sea too and some villagers went as a family in their spare time. They recalled great catches of fish which included different species such as the Grey Mullet, Largescale Mullet, Grouper, Japanese Seaperch and Russell's Snapper. Catches differed with the seasons, for example, there were a lot of Tenpounders



caught in March and April. In the early 50s, villagers rowed out to sea and could net anywhere from 10 to 100 catties of fish within one night. They would then sell the fish to middlemen in Sha Tau Kok. At that time, women generally farmed in the village and men went fishing. There were many fishing boats moored along the coast of Lai Chi Wo where there is now a large community of mangroves. Later, after more and more men moved overseas to places like the UK, fishery in the village naturally declined.

Besides fishing out in the sea, villagers also liked to fish along the coasts of Lai Chi Wo and in streams. It was not just for food but also as recreation. Villagers used fishing spears to catch fish and they loved catching crabs as well. Mud Crabs were their first choice, followed by "Fierce Sister" (惡麻姐; a kind of crab that is smaller than Mud Crabs). Villagers said there were also many clams and conches in Lai Chi Wo, for example Yellow Clam and Pearl Whelk. The conches picked up from the seashore can be used in a game called "piggy baby and piggy mommy", which was about placing a bigger conch over a smaller one. As more fish, shrimps and crabs appear at night than during the day, villagers sometimes shone light on the crabs and fish at night to catch them and used homemade tools crafted from bamboo and umbrella frames to spear the shrimps.

Village life in the past related closely to nature. Villagers relied on nature for daily necessities and they felt deeply the power of nature. The awe Lai Chi Wo villagers feel towards nature is apparent from their worship of the Earth God, known as Pak Kung (\triangle) to the Hakkas. Pak Kung altars can be found in many locations in Lai Chi Wo, for instance, in front of the walled village, at the entrance of the bridge, at the village gates and at the well. In contrast, city folk are constantly trying to conquer Mother Nature, which means that a serious rethink of our attitude towards nature is needed.

We never worried about not having fish or crab to eat – there were plenty. There were no gas lamps in the past, so we brought fire bamboo torches* to the beach at night to shine light on the fish and crabs. We could catch a whole bucket of them in just a while.

Village chief Ah-Chat Tsang

^{*} A fire bamboo torch is made by igniting kerosene and cotton which is placed in the hollow part of a bamboo.



Nature and Culture Intertwined in a Village Ecosystem

An Interview with the Lai Chi Wo Ecology Research Team of The University of Hong Kong: Dr Billy Hau, School of Biological Sciences; Ryan Leung, Senior Project Officer, Policy for Sustainability Lab; Wing-Fung Lo, PhD Student of the Faculty of Social Sciences and Ying-Kin So, PhD Student of the School of Biological Sciences

> Lai Chi Wo is situated in the north-eastern area of the New Territories and a rare ecological hotspot in Hong Kong. With an area of only around 1km², it is a small natural valley surrounded by hills on three sides and facing the enclosed sea of Crooked Harbour in the east. This small place has very high habitat diversity including Fung Shui woods, secondary forests, shrublands, freshwater streams, open farmlands, freshwater marshes, mangroves, mudflats, rocky shores, and an enclosed bay. The habitat diversity contributes to a high species richness including a number of species of regional or global conservation concern, such as Yellowbreasted Bunting (Emberiza aureola 黄胸鵐 / 禾花雀; IUCN*: Critically Endangered), Burmese Python (Python bivittatus 緬甸蟒; IUCN: Vulnerable), Water Fern (Ceratopteris thalictroides 水蕨; a class II protected species in China) and Chinese Bullfrog (Hoplobatrachus rugulosus 虎紋蛙 / 田雞; a class II protected species in China). In Lai Chi Wo, we can also find the locally unique estuary Fung Shui wood formed by White-flowered Derris (Derris alborubra 白花魚 藤) and Coastal Heritiera (Heritiera littoralis 銀葉樹), as well as the most extensive seagrass bed of Dwarf Eel Grass (Zostera japonica 矮大葉藻) in Hong Kong. "It is rare to find a place in Hong Kong that has such diverse habitats. The habitat diversity and integrity in Lai Chi Wo far exceed that of other rural places." Dr Billy Hau of the School of Biological Sciences at The University of Hong Kong is the person-in-charge of the Lai Chi Wo Ecology Research Team. He pointed out that Lai Chi Wo is a very typical but surprisingly well-preserved village ecosystem.



The world-renowned marine ecologist Professor Brian Morton pointed out in an academic journal article published in 2016 that Lai Chi Wo is likely to be the most intact "seagrass bed – mangroves – forest" ecosystem remaining in China (Morton, 2016). The present ecological condition of Lai Chi Wo is inextricably related to its geographical location, the designation of country, marine and geoparks, as well as its long settlement history.

"Due to the lack of resources in the past, ecological conservation was mainly focused on relatively undisturbed and primitive areas. However, with evolving social norms, society now has higher expectations with conservation extending to farmlands and surrounding rural areas." Due to problems related to pesticides, chemical fertilisers and sewage discharge, the ecological value of farmlands has long been overlooked, but in fact many ecological hotspots overlap with traditional farmlands, especially in Hong Kong's lowland habitats like the fishponds in Deep Bay and the agricultural wetlands in Long Valley. Traditional agricultural practices inadvertently created more diversified ecological environments. Taking Lai Chi Wo as an example, villagers in the past modified the environment to meet their living needs. They modified slopes into terraced paddy fields, forming wetlands; preserved and planted trees behind the village and at the estuary as barriers, forming Fung Shui woods and dredged the accumulating sediments in streams and created the irrigation and drainage channels, resulting in a rich hydrological system. Humans and nature have evolved together for centuries and finally reached an ecological equilibrium. "In the past, there were paddy fields and freshwater wetlands on the hillsides and at the foot of the hills. Unfortunately, villagers stopped farming for decades, thus some wetland species typically found in paddy fields, such as the Rice Fish (Oryzias curvinotus 弓背青鱂), have gradually disappeared from Lai Chi Wo as the paddy fields dried out."

In 2014, Dr Hau started leading the research team in carrying out monthly ecological monitoring trips for the purpose of farming rehabilitation in Lai Chi Wo. The team monitored the changes in species richness and abundance of plants, birds, butterflies, dragonflies, amphibians and reptiles, mammals, freshwater invertebrates and fishes. "When we first came to Lai Chi Wo, we found that most farmlands were covered with shrubs and some young trees, exhibiting a distinct succession trend from agricultural wetland to dry abandoned farm land. We believe that the rebuilding of water channels and the resumption of paddy farming in our farming rehabilitation works can help restore the ecological value of Lai Chi Wo instead of destroying it. Although certain species might



In fact, the ecological data taken after farming rehabilitation in Lai Chi Wo present a trend of ecological recovery. Data collected in the past three years show that the number of amphibians has significantly increased.

^{*} Since 1963, the IUCN (International Union for Conservation of Nature) has been compiling the Red List, which ranks the extinction risk of different species into nine conservation categories: Extinct, Extinct in the wild, Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern, Data Deficient and Not Evaluated.



The Lai Chi Wo Ecology Research Team conducting regular monthly ecological monitoring.

be affected, the overall biodiversity can still be maintained or even enhanced." In fact, the ecological data taken after farming rehabilitation in Lai Chi Wo present a trend of ecological recovery. Data collected in the past three years show that the number of amphibians has significantly increased. "Chinese Bullfrogs like ditches especially. The irrigation channels rebuilt for paddy farming provided an attractive environment for them to reproduce," team member Wing-Fung Lo explained. Another member Ying-Kin So is carrying out a long-term research on freshwater fishes and invertebrates in Lai Chi Wo. "The small cisterns built by farmers for irrigation attracted dragonflies, such as Amber-winged Glider (*Hydrobasileus croceus* 劈斑楔翅蜻) and Ruby Darter (*Rhodothemis rufa* 紅 胭 蜻), both of which love the deep water environment. These species were seldom seen before farming rehabilitation," he added.

In recent years, international treaties or organisations such as the Convention on Biological Diversity and the Food and Agriculture Organisation of the United Nations have repeatedly urged for global attention on the relationship between agriculture and biodiversity, and recommended adopting ecology-based agricultural practices. "To develop eco-farming, we have to first conduct baseline ecological surveys to understand the characteristics of the original habitats so that we can avoid disrupting the ecologically sensitive locations. The design of farming practices can also take into account advice from ecologists. Not only can this reduce the negative environmental impacts, but also likely contribute to conservations through improved farming techniques." Farmers and the Ecology Research Team in Lai Chi Wo communicated through regular meetings and exchanged information on special ecological records through on-line platforms. "Farmers and villagers live in the natural environment of the village every day. Their ecological knowledge sometimes exceeds ours, and they are also more attuned to the small changes in the surrounding environment. They provided a lot of firsthand data for our scientific analysis to understand the relationship between living things and agriculture or other human activities. The research findings are crucial for knowing how to promote agriculture-related biodiversity conservation in Hong Kong."

Conflicts between farming activities and the ecological environment are hard to resolve all at once. Every day, we are still facing problems such as wild boars breaking through fences, porcupines stealing papayas, and birds eating up grains. Striking a balance between ecology and agricultural production is indeed a huge challenge. "Actually, many preventive measures written on books tend to be not very effective when applied on-site because most of them were conducted in laboratories, whereas on-site application can be affected by other variables which are not easy to control. Therefore, farmers and ecologists really need to collaborate closely and experiment repeatedly to find out the most feasible eco-farming methods."





Conflicts between farming activities and the ecological environment are hard to resolve all at once. Every day, we are still facing problems such as wild boars breaking through fences, porcupines stealing papayas, and birds eating up grains.

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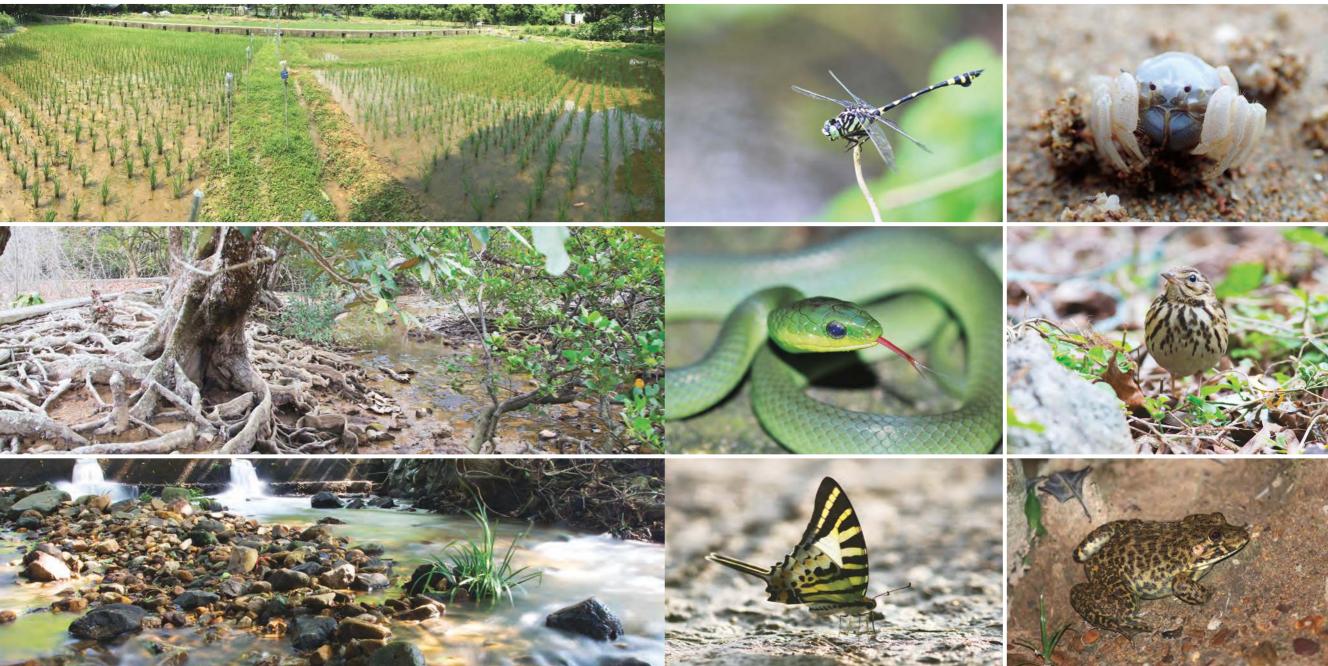
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A Place Brimming With Life

Lai Chi Wo is a natural valley with an area of just 1km², yet it possesses a wide range of habitats which are home to diverse species. Various facets of the wilderness are evident in the village throughout the day and seasons, and any walk around the village could turn into a chance encounter with interesting fauna and flora. Wildlife and humans here share the blessings that nature have endowed us with.



The Living Lai Chi Wo: A Perfect School of Nature

Dr Angie Ng, Conservation Manager, The Conservancy Association

When people talk about Lai Chi Wo, they would always praise the green hills and clear waters there and describe it as a tranquil village with primitive simplicity. I still remember when I first visited this place ten years ago; I was attracted by the traditional architecture and traces of village life in the past. In an approximately one-hour journey, I passed through forests, stream, wetlands, flat agricultural lands, and walked by the coast where there are mangroves, mudflats, small sandy beaches and rocky shores. With the vibrant wildlife, the whole tranquil environment became lively and spirited. At that time, I found that this place was truly a natural treasure. Human and nature are so close here that it genuinely created a perfect outdoor classroom for people to indulge in nature.

Unexpectedly, 10 years later, I had the fortuitous opportunity to launch nature education activities in Lai Chi Wo and make use of the environmental resources here to inspire more city folk to rethink the human-nature relationship. When we were discussing the theme of activities, the words "Lifestyle, Life, Liveliness" immediately came to my mind as I hoped to connect human and nature through various kinds of nature education activities. The word "Liveliness" also reflects our aspiration for this place to endlessly sustain its flourishing vitality (of both humans and all other living things in nature). During the Programme, more than 30 environmental education activities and field studies have been organised, offering a different experience of nature to almost 1,000 city folk. We were proud to receive participants' feedback saying that "I wish I could have stayed longer in Lai Chi Wo" and "I knew more about nature". Looking back, the success of the activities was due to the devotion and hard work of the staff, but we cannot deny that the innate charisma and the magic of this place also played an important role! Below is a brief introduction to the natural environment of Lai Chi Wo and sharing of our experience. Perhaps this might provide you with some clues about the magic of Lai Chi Wo.

Nature is the Source of Inspiration Lai Chi Wo is relatively small compared to many other villages in Hong Kong. Here the walled village and the major farmlands do not cover a significant area. But if you take a closer look, you will realise how abundant the natural resources are inherited in this place. Lai Chi Wo faces the sea with hills backing the village. There is a clear stream passing through the farmlands and flowing out to the sea. It features a great diversity of habitats and species, giving it infinite possibilities and bringing us endless inspirations. What is most special about this place is the interaction and integration between the natural environment and human life.

Learn about Plants and Pass on Traditions Lai Chi Wo is surrounded by hills on three sides. Although the hills are not high (the highest point on Lo Fu Shek Teng measures around 230m), they do look spectacular. They surround the flatland



beneath and act as a good shelter, hence the forest is more luxuriant towards the lower part of the hills. The forest behind the village is a Fung Shui woodland with special cultural value. More than 100 plant species have been recorded in this Fung Shui woodland, including some rare species in Hong Kong. The Fung Shui woodland is already designated as a special area. There are a few peculiar trees of over 100 years old at the fringe of it: The "Hollow Tree" (Autumn Maple), where children and tourists loved to play around in the old days; the "Marriage Tree", a beautiful name to express good wishes for lovers as inspired by the natural phenomenon of two trees intertwined together (which in fact is a Banyan Tree strangling an Autumn Maple tree); and the "Fivefingered Camphor", with only four trunks remaining today, is a Fung Shui tree which villagers fought to keep with their lives. These trees have become the famous figures and goodwill ambassadors of Lai Chi Wo. They are the must-see tourist attractions and also good starting points for tourists to get to know Lai Chi Wo.

Villagers are not unfamiliar with the plants in the woods, though they might not know the scientific names of the plants, they are highly knowledgeable about their characteristics and uses. For example, villagers are used to steaming Hakka Cha Kwo on top of the leaves of Wild Coffee, a common shrub in the understorey of most forests in Hong Kong. The leaves of Wild Coffee have a leathery texture with relatively thick layers of wax on both sides. They will not break easily even after steaming and will not stick to the food, hence they are ideal for serving Cha Kwo. Knowing how to make good use of plant resources is a crucial part of traditional life. Present society emphasises convenience and speed hence many natural materials in our lives have already been replaced by artificially synthesised or chemical ones, making it hard for city folk to appreciate the importance of nature. In the Programme, we found that villagers are striving to keep their tradition of using natural materials in The "Five-fingered Camphor", with only four trunks remaining today, is a Fung Shui tree which villagers fought to keep with their lives. It has become a famous figure and a goodwill ambassador of Lai Chi Wo. It is a mustsee tourist attraction and also a good starting point for tourists to get to know Lai Chi Wo.



daily life, which demonstrates our strong connection with nature. We really wanted to share the experience of Lai Chi Wo to give more city folk a chance to understand and experience the human-nature relationship. Therefore, we organised a range of unique workshops and day camp activities, such as making Hakka Cha Kwo.

Learning about Stream Ecology is Fun The stream that passes through Lai Chi Wo can be regarded as the lifeblood of the village and is the prior condition which enables villagers to settle here. From the past to present, this stream has been playing its irreplaceable role of irrigating farmlands and providing drinking water. Villagers still remember that as children they enjoyed playing in the stream to cool themselves off in the summer. Perhaps for the same reason, stream ecology field study is the most popular of all the summer activities. With the riparian trees blocking most of the sunlight and the splashes bringing moisture to the sweltering air, the stream seems to be the exclusive place to enjoy the coolness in summer. Although most of the students who joined the activity were used to air conditioning, when they came to the stream, we never heard them mentioning this seeming necessity of urban dwellers. Instead, they thoroughly enjoyed the natural sources of coolness brought by the shade of the trees and the stream.

Most Hong Kong people are unfamiliar with natural streams, and it is difficult for them to relate streams to all creatures of the world and human life. This stream in Lai Chi Wo is an excellent place to illustrate such a relationship. It is approachable: even people who come into contact with it for the first time would not find it dangerous and resist it. Its environment is tranquil and comfortable: the running water seems to wash away people's troubles. It is unique and interesting: although stream water flows down unidirectionally from higher ground, the stones in the stream create infinite changes to the flow rate of the running water, and the many species living here use their unique body structures to adapt to this non-stop state of motion. During field studies, students were always attracted by the peculiar organisms in the stream. What surprised them most was that the small organisms that crawl on stones like aliens are actually the larvae of the colourful dragonflies. In fact, many dragonflies spend their larval stage in water, and they spend even a longer time in water than in the air.

Farmlands Reconnect All Living Things Harmoniously

The farmlands in Lai Chi Wo used to be full of paddy. Villagers could still recall fond memories of encountering species like loaches and Chinese Bullfrogs in the farms. The golden fields were something that they reminisce every now and then. But today the revived farmlands have become even more attractive. There are paddy fields and other wet farmlands, neat fields of organic vegetables, as well as experimental fields for various kinds of farming methods. It was a fun experience bringing students to the farmlands. Many of them saw the crops in the field as something new and were surprised to know that those were the ordinary vegetables that they usually ate. This was certainly a simple and successful botanical lesson!

Farmland is a place where we can most easily experience and reflect upon the relationship between human and nature. Although farmlands are cultivated and maintained by people, they can also serve as a shared home for many species. In the past, chemical pesticides were not used in farming, and the croaks of frogs and buzz of insects were commonplace in the fields. With the eco-friendly farming methods currently adopted, we could see butterflies flitting about, and dragonflies, beetles, and grasshoppers flying about on the fields every day. The richness of biodiversity in farmlands is actually comparable to that of natural habitats. This showcases the commitment of farmers in maintaining a harmonious relationship with nature. In a farmland ecological survey, a student stated that he loved and hated these organisms – he loved seeing so many species of different appearances and colours, but he hated the amount of time it took him to finish counting a sample due to the abundance of species. The tutors burst out laughing upon hearing this love-hate relationship.



The Diversified Coastal Habitats are Living Classrooms

The shoreline of Lai Chi Wo is not long but indeed special. The ancient and unique community of Coastal Heritiera and White-flowered Derris has become a landmark of this place. Almost all kinds of coastal habitats in Hong Kong can be found here. Mangroves, mudflats, seagrass beds, sandy beaches, and rocky shores assemble along the short shoreline, making this the best place to conduct coastal biodiversity educational activities.

At the seashore, we love telling participants about the relationship between shores and delicious seafood. Most people thought marine organisms set up home deep in the sea, but in fact many fishes, shrimps and crabs lay eggs or spend their juvenile stage in coastal habitats like seagrass beds and mangroves before returning to the sea afterwards. Simply put, the seashore is a larval nursery of marine organisms. I still remember the excitement of a group of students who found a small mantis shrimp near the seagrass bed. From this, I felt deeply that there is no better way to learn than through this kind of experience.

Conclusion From the responses of the participants, we can conclude three things. Firstly, hands-on exploration and experience is a good way to educate. The accessible and abundant natural resources in Lai Chi Wo complement this kind of learning. Secondly, things related to human life attract participants more easily. The traditional village and farming culture of Lai Chi Wo has made nature part of the living. Villagers would always share the space and resources here with the wildlife. This kind of connection is exactly what urban dwellers need to re-establish. Thirdly, to most participants, convenience, comfort, novelty and uniqueness are the essential elements for cultivating a sense of involvement, and these conditions are naturally available in Lai Chi Wo. I hope we can learn from the past to make wise use of the natural resources here, so that Lai Chi Wo can continue to be a cradle of life.

Touching the Earth: Environmental Art Workshops at Lai Chi Wo

An Interview with Environmental Artist Monti Lai, New Settler in Lai Chi Wo

Running around with her siblings in the valleys is one of Monti's most vivid childhood memories as she moved to urban areas not long after. In 2014, she joined the Lai Chi Wo agricultural and community leadership training programme organised by The University of Hong Kong. After completing the training, she moved to Lai Chi Wo, hoping to find inspiration for her creations in the fields. She tried to plant rice hoping to connect with her roots, in particular with her deceased grandmother who was said to be talented in growing rice. She and three other female trainees of the programme established a small farm called "MIND" and are determined to follow their hearts and lead an agricultural life. Farming has drawn Monti back to rural life again, and she has come up with a new understanding of the relationship between human and nature. Having lived in Lai Chi Wo for the past three years, Monti has held a number of environmental art workshops showcasing her expertise and passion, hoping to help more people feel the close relationship between land and our lives.

Monti invited two friends to Lai Chi Wo to host workshops together. The three artists led students of different ages to explore different places in Lai Chi Wo. Participants touched stones, knocked on tree trunks, generally having fun in the rural environment. The artists hoped that through different ways of observing and creative exercises, people could learn to appreciate and understand nature from various perspectives. As of June 2016, they had hosted four workshops with nearly 130 students participating.

Students who joined the environmental art workshops got to visit the village and connect with a piece of land they had never been to. There are no roads that reach Lai Chi Wo directly. A round trip takes three to four hours by car, sea transport or hiking, even longer than a flight to Taipei. There are no supermarkets or restaurants in the village. As for TVs, most of them are broken... However, it is these so-called deficiencies that allow Lai Chi Wo to maintain its tranquillity and simplicity. This leads us to reconsider what is really necessary in life.

A good way to look for the answer is by returning to nature. At least the earth makes us feel grounded, the green trees and fields soothe our eyes, and the gentle breeze caresses our skin... It seems that this piece of land is unaffected by the so-called "development". It is as though the village has been frozen in time as it still maintains its appearance from the 60s and 70s. Monti believes this brings new opportunities. "We feel like we've returned to our roots, and can ponder on the meaning of land and the connection between land and our life," she said.

Some questioned whether it is necessary to go all the way to Lai Chi Wo to conduct the environmental art workshops. Monti thinks as long as you have all the materials and elements for creation, the workshops can be conducted anywhere. "However, the most important element is the environment here. The workshops' emphasis is not the creative outputs, but the process through which every participant interacts with this piece of land and with the people, animals and plants in the village," she said. She further pointed out, "From knowing, understanding, to cultivating a connection beyond mere knowledge - this is exactly what is lacking in conventional environmental education." She took one of the exercises as an example: the exercise encouraged students to observe the plants in front of them, and draw their unique forms. Most students focused on drawing their shapes from memory, and overlooked that the plants were in fact waving at them. Monti smiled and remarked that maybe we need to let go of our preconceived knowledge and norms, in order to truly appreciate the beauty of nature. "As Zhuangzi said, 'The world is beautiful, but does not speak of its beauty', this expression can encourage us to observe our surroundings in detail, and use our heart to discover beauty." Monti continued, "I believe that only when everyone can see the beauty of nature will Hong Kong and even the whole world alter the current mode of development to re-establish the peaceful man-land relationship."

As an artist, beyond thinking with our brains, we need to feel with our hearts, get moving, and be one with the land that nurtures all that exists. Monti feels that only through on-site experience can we truly have a deep and lasting impression. As long as we are willing and dare to discover what is out there, we will find the beauty of nature all around us. She has compiled the workshop exercises into an online booklet for free download at http://touchinglcw.wixsite.com/laichiwo, and encourages everyone to practice these exercises in their daily lives. This can start as simply as looking out your window at home, then going outside to admire the wild flowers and grass growing on the roadside. She said, "You can also bring simple materials for artistic creation, or even look for something suitable on the spot. Close your eyes and draw; close your eyes and roam. Slow down and feel the environment with your different senses and your heart. Maybe you will find another Lai Chi Wo."



Lai Chi Wo is a bridge, connecting man and nature.

Learning in the Village

The village is a place for city folk to learn to live in harmony with nature. It is also a place for them to explore nature using all senses and even experience the rural lifestyle. Not only can they acquire interdisciplinary knowledge here, but they also learn to respect all living things and treasure resources.





Restoration of Abandoned Farmland

13 (0)

Restoration of Abandoned Farmland

Vivian Leung, Project Officer, Policy for Sustainability Lab

Rural areas and farming have always been inseparable, so if we are to revitalize a village, agriculture will be an integral part of this process too. The local agricultural sector started declining in the 1960s and 70s, and this downturn continued well into the 90s when we started facing competition from the Mainland. Further conversion of agricultural land for non-agricultural use in recent years has further stunted the industry's growth. This resulted in a severe setback in terms of technological prowess, knowledge, machinery, manpower, market share, operations, policies, etc. when pitted against the rest of the world. Rehabilitating the farms on a piece of remote land that has been deserted for decades in Hong Kong, where emphasis has always been on efficiency and the cost-effectiveness, will be no small feat.

As the Chinese saying goes, "enduring small changes can move a mountain", so begins the farming rehabilitation in Lai Chi Wo when fellow villager, David tilled his first plot of land. The capacity and reach of one person is nonetheless limited, hence the Sustainable Lai Chi Wo Programme aims to gather more participants, hoping to overcome the challenges of village revitalization with concerted effort. In the Programme, The Hong Kong Countryside Foundation rented farmlands which are fragmentally owned by villagers in Hong Kong and elsewhere, Produce Green Foundation and The University of Hong Kong formed and headed the farming team, and worked hand-in-hand with the ecology research team to re-examine the geographical environment and the natural habitats of Lai Chi Wo in order to rehabilitate farmlands using organic, environmentally-friendly methods and welcomed the villagers to teach us their traditional ways of farming. We hope to rejuvenate the

farmlands in Lai Chi Wo with joint efforts between villagers and city folk, supported by modern and scientific farming practices.

Though everything seems to be under control now, words can hardly describe all the hardships we have endured in the past four years. We faced a host of unexpected problems, including tilling farmland manually during the hottest season of the year, mistakenly cultivating the "Fu Yong" fields (湖洋田)*, extreme weather causing floods and levee breaches; birds, wild boars and porcupines breaking through fences and eating up all the harvest, high environmental arsenic content in the long abandoned soil, disputes over water resources allocation, poor harvest due to pests and diseases, transportation difficulties, insufficient manpower, management of shared resources, etc. Problems do not come singly; outsiders can hardly understand the hardships of farming rehabilitation!

Fortunately, we did not give up in spite of the overwhelming challenges. To date, Sha of agricultural land in Lai Chi Wo have been rehabilitated, comprising of seven community farms started by indigenous villagers and new settlers, and two largerscale farms operated by Produce Green Foundation and The University of Hong Kong. Agricultural produce includes rice, ginger, radish, papayas, sweet potatoes, peanuts, roselle, lemongrass, etc. Farmers also jointly developed product lines such as turmeric oil, ginger powder, ginger soap, ice lollies, roasted rice tea and natural mosquito repellent. In early 2017, the first "Lai Chi Wo Farmers' Market" was organised to promote local agricultural produce and products to visitors. Although the scale of the market is still very small, a real agricultural community has been taking shape in Lai Chi Wo!

Every grain of food is the fruit of hard work. We salute once again all the revitalization pioneers of Lai Chi Wo!

* The "Fu Yong" fields (湖洋田) refer to a piece of marshy farmland in Lai Chi Wo. "Fu Yong" (湖洋) means "marsh" in Hakka.



The Journey of Farming Rehabilitation

The Hong Kong Countryside Foundation



On October 23, 2013, the programme team signed a lease agreement with Lai Chi Wo Village, officially starting farming rehabilitation! The biggest challenge when the Programme started rehabilitating farm land in Lai Chi Wo was the leasing of land itself. There were no farmers in Lai Chi Wo, only landowners. But most of them have moved abroad to the UK and other countries. Thus it was no easy task to establish trust with these landowners. We studied the aerial photo taken in the 1960s and conducted site visits to understand the situation on the ground. We selected 5ha of farm land for the Programme, but a problem emerged. The population of Lai Chi Wo has grown through its long history so land ownership was very fragmented. Furthermore, land records have not been updated for a long time. We had no clue how to reach landowners to discuss the leasing of land. Other than real estate developers, no other NGOs in Hong Kong have ever succeeded in leasing farm land at this scale.

We were worried for a while. Fortunately, the connections we made in the past years proved useful. David, the indigenous villager who had been trying to till the land on his own, proposed an "ABC model" (A refers to landowners of Lai Chi Wo, B refers to an intermediary company recognised by the village, C refers to The Hong Kong Countryside Foundation). Landowners could lease their lands to the trusted intermediary, and The Hong Kong Countryside Foundation would only need to sign one lease agreement with the intermediary as a means to rent the farm land desired. This ABC model provided a pragmatic solution to the trust issue because the intermediary could facilitate the conclusion of farm land leases despite The Hong Kong Countryside Foundation not yet securing the trust of the landowners.

With the support of the village chiefs, David reached out to fellow villagers in Hong Kong and those residing overseas. We cannot imagine how many phone calls he has made, how many email messages he has sent and how many villagers he has personally spoken to. He even flew to the UK to persuade those who were unsure of or sceptical about the Programme. In the face of this daunting and virtually impossible task, David was powered by determination of a high order and overcame numerous hurdles on the way. We eventually managed to lease more than half of the targeted land area and the Programme officially commenced in October 2013. For this, we are deeply grateful to David. We still vividly remember the moment when the lease agreement was signed at The University of Hong Kong. There was no particular ceremony but we were all excited that it marked the start of the village revitalization journey. Those present knew that we were going down a path which no one has trodden before in Hong Kong. While our goal was clear, the journey was full of uncertainties. Every step forward would carry risk. The only thing we could rely on is faith.

With the launching of the Programme, staff members required a work space in Lai Chi Wo. Some also started staying overnight too. Villagers were worried that this might bring about cultural conflicts. To settle this, we discussed thoroughly and devised a code of behaviour which new settlers were requested to sign and follow. The code reflected our respect for the traditions of Lai Chi Wo and the Programme's fundamental mission viz. to conserve and promote the culture of Lai Chi Wo. As it turned out, new settlers and indigenous villagers managed to live harmoniously during the past years. Indigenous villagers also began to appreciate that new settlers from urban areas benefitted the revitalization of Lai Chi Wo. They contributed not only manpower but also modern views and innovative concepts which were useful to searching for and establishing new economic models for the village. This noticeable change in attitude among villagers conforms with what similar programmes elsewhere in the world have experienced.

The Programme had a difficult start in 2014. Rumours abound that The Hong Kong Countryside Foundation had a hidden agenda viz. expanding the Conservation Area by deliberately allowing weeds



In autumn of 2014, we cooked the first crop of rice for villagers who returned to the village for Chung Yeung Festival. and scrub to grow on the leased farm land. To dispel such rumours, prompt actions were needed to visibly demonstrate our commitment to farm land rehabilitation and agricultural revitalization. Thanks to the professionalism and sheer hard work of our partner, Produce Green Foundation, the paddy fields were soon ready for cultivation. In April, rice seedlings were transplanted for the first time in decades, bringing paddy fields back in the landscape of Lai Chi Wo. We invited villagers to come and join us. They happily stood on the rice fields and reminisced about the past with nostalgia. But they also wondered aloud why city folk would come all the way to this remote place for physically demanding farm work. Anyway we were glad to see them returning home and re-connected with the land once again. In July of the same year, the first crop of rice was harvested, marking a milestone in the revitalization of Lai Chi Wo.

Owing to limited manpower, wild vegetation in the fields could not be removed overnight. It had to be carried out in stages. Problems arose one after another. For example, a villager complained about other plots being cleared whilst his was left untouched, and suspected that we had certain ulterior motives. Since the fields had been fallow for many years, bunds marking the plots had disappeared such that boundaries marked clearly on maps were virtually invisible on site. It was therefore difficult to precisely pinpoint the area leased. Thus sometimes villagers would complain that farming took place on un-leased land. In all such cases, we had to patiently communicate with the relevant landowners, sincerely explain our intentions and clearly state that we had no vested interests nor any hidden agenda. The concerns of landowners were taken seriously and whatever needed to be rectified would be conscientiously done. No matter what, we shared with villagers the same overarching goal, that is, to revitalize Lai Chi Wo.

In autumn of 2014, we cooked the first crop of rice for villagers who returned to the village for Chung Yeung Festival. We recognised that fields which had been dormant for decades did not produce good rice, but the villagers still gobbled up the rice, reflecting their intimate sentiment towards their village. What we saw added energy to the Programme and gave us the confidence to march on.

Following the completion of wild vegetation clearance, farming expanded in scale. Complementary education and training activities were rolled out. Lai Chi Wo gained increasing recognition in Hong Kong and worldwide. More and more tourists came to the village, bringing vibrancy which was once lost. Governmental departments also started paying more attention to this place. Apart from gaining a better understanding of the Programme, villagers also saw indirect benefits arising from the Programme, such as the launching of the Kaito service which they had long awaited, which helped strengthen the trust between villagers and the Programme. We befriended more and more villagers and were no longer seen as strangers. We are now treated as friends of Lai Chi Wo.



We invited villagers to come and join us. They happily stood on the rice fields and reminisced about the past with nostalgia. But they also wondered aloud why city folk would come all the way to this remote place for physically demanding farm work.

Abundant Harvest

Cultivation had ceased completely in Lai Chi Wo for more than 30 years until we started sowing the farmlands again with rice seeds in spring of 2014. Since then, the water-blessed Lai Chi Wo has resumed its traditional terraced paddy farming culture. The centuries-old scene of farmers hoeing crops in the midday sun and their sweat dripping onto the soil has now been brought back to life in the village.







Reconciling Agriculture and Conservation

Produce Green Foundation



With farming rehabilitation being our primary mission, we treated the piece of land in front of the West Gate of Lai Chi Wo as our "blank canvas". Farming officially started in Lai Chi Wo after the groundbreaking ceremony in December 2013. With farming rehabilitation being our primary mission, we treated the piece of land in front of the West Gate of Lai Chi Wo as our "blank canvas". To reconcile agricultural and conservation efforts, we have had to take on stiff challenges and we count ourselves lucky that we are able to have this rare opportunity to draw a different future for Lai Chi Wo through farming rehabilitation.

Rebuilding the Drainage and Irrigation

System As farming in Lai Chi Wo has been abandoned for decades, weeds and bushes have encroached onto the winding paths and irrigation channels in the farmlands, leaving only faint signs behind. The farmland which we have decided to rehabilitate is situated in a valley with one side facing the sea. The high groundwater level and prolonged accumulation of rainwater had turned most farmland into swamps. Cultivating such land thus became much more challenging.

Irrigation and drainage are the lifeblood of farming as it directly affects the growth of crops and harvest. The first order of business was to drain the swamp, hence we dug ditches around farmland to drain water into stream. In addition to that, we constructed a main drain along the central axis of the farmland to drain excess water from both sides. We also meticulously excavated water channels and drain holes for each piece of farmland according to the topography and crops planted so that the farmers can drain water at their own pace.

Without a doubt, irrigation is crucial as well. We dug a cistern on ground above the farmland and built channels to draw in water from the hills. With the presence of natural stream water, rainwater and groundwater, we now have a sufficient water supply to carry us through the dry seasons.

Even though much of the restoration work was carried out with an excavator, it still required huge manpower to rebuild the irrigation and drainage network as well as the paths and bunds on the farmland. This was a gruelling process but when we saw the results of our labour gradually taking shape, we were still filled with immense pleasure.



Rice seedlings neatly transplanted in Spring.

Paddy and Arsenic Soon after we began farming, we invited the Agriculture, Fisheries and Conservation Department to collect soil and water samples for testing. But it turned out that the arsenic concentration in parts of the land exceeded the local standards for organic agriculture practices. In fact, we were informed that the level of natural arsenic concentration in certain soil is typically higher in Hong Kong and South China.

Since paddy naturally absorbs high quantities of arsenic, we imported several varieties of paddy with the help of Guangzhou Academy of Agricultural Sciences in order to compare arsenic accumulation in different paddy varieties. We also used biochar on the farmland and conducted a before-and-after comparison of arsenic content in the paddy after harvest.

However, the biochar amelioration results were not encouraging as the change in arsenic content was not significant. Yet, among the varieties of rice tested, we were able to find some that conform to the WHO standard of arsenic in rice.

Due to limitations such as the weather and crop management, our paddy harvests in the past four years varied and was less than optimal. Having said that, the open paddy fields, golden rice ears and the simple joy of harvesting still offered some modicum of comfort to the farmers.

Landscaping with Green Manure and Intercropping

Following the rehabilitation of farmland, crops were planted but problems also started appearing. After the long hiatus in farming, the land had become infertile and overrun with weeds. The land being located in a hot and humid valley with insufficient ventilation also gave rise to pests and diseases. We have had no choice but to face all these issues squarely.

Green manure can, to a certain extent, increase the content of organic matter in soil, control the growth of weeds and prevent diseases and pests. Landscaping with green manure can even add colours to the field. Hence we planted sunflowers, Chinese milk vetches, buckwheat, trefoil, alfalfa and Mexican aster as green manure in rotation with main crops.

Enhancing agricultural biodiversity is also an important means of preventing problems, thus we intercropped many different species in the fields. For example, we intercropped coffee, perilla, Chinese mesona, broadleaf holly leaf, sweet potatoes and lemongrass in papaya orchards, whereas fishwort was intercropped in green plum farms and India yellowcress in turmeric fields. The fast-growing edible wild herbs were not only helpful in preventing soil erosion, but also in controlling the growth of weeds. Of course, these wild herbs also benefited our taste buds when served on dining tables!

Coexistence with Wild Animals When the crops were finally ready for harvest after a whole season of hard work, our neighbours seemed to be extremely keen to come and help us out.



Jian lotus flowers have white petals with red tips. Their big round seeds, snow white in colour, have been used as imperial tributes for many dynasties. Stray cattle love young green rice seedlings, while birds are interested in the golden rice grains. Electric fencing could deter stray cattle from entering the field in most cases, but the anti-bird wires, bird repellent devices and colour ribbons could only serve as temporary deterrents. To keep our crops safe from the pest birds, we could only use bird nets to cover up part of the paddy fields.

Autumn and winter are the seasons when wild boars and Chinese porcupines are more active. Taro, sweet potato and corn are their favourites. Even the electric fences and nets could not stop the invasion of these animals. Wild boars could devour the whole taro and sweet potato fields in just a few days' time. Porcupines are even more formidable since they could climb trees and reach for papayas. They both seemed to have established a symbiotic relationship: wild boars led the way and porcupines brought up the rear. The farmers were completely helpless against such hostile raids on their lands.

Taros and sweet potatoes are now planted in heavily fortified fields, with only a small number of taros planted at the edges for the neighbours. We hope that we can find a way to coexist with the wildlife.

Challenges and Attempts to Overcome Them Lai Chi Wo

is difficult to access by road, hence we can only transport supplies by sea. Goods must first enter the Sha Tau Kok restricted area, then transported from Sha Tau Kok Pier to Lai Chi Wo, and finally to the farmlands. The manpower and transportation costs involved in this process have put a considerable burden on the operation of farms. In the same vein, the sale of produce is also limited by these transportation constraints.

It could take a whole day for us to handle the transportation of goods and materials. The situation was further aggravated by the shortage of manpower and we had to repeatedly postpone our farm work and plans. Local agriculture has long faced a decline and today only a few experienced farmers remain in Hong Kong. It is perceived that poor accessibility has posed an additional difficulty in recruiting farmers. The only hope to alleviate the problem is to nurture young and new generations to aspire to become farmers. To achieve this, we have introduced the "Three Dous" Incubation Scheme under the Programme.

In facing these different challenges, we adjusted the choice of crops accordingly and planted more crops that have a longer shelf life or can be sold as dried products without much processing, such as lotus seeds, day-lilies, chrysanthemums, broadleaf holly leaves, ginger, turmeric and chilli. We hope our attempts can set a suitable production and marketing direction for Lai Chi Wo.



1. After the autumn harvest, we sowed the paddy fields with Mexican aster seeds and by early spring the flowers were blooming beautifully.

- 2. Having re-adjusted the electric fencing according to the porcupines' characteristics, there are now plenty of papaya fruits.
- 3. Lai Chi Wo is suitable for planting non-genetically modified papayas because the remote and isolated location means the risk of genetic pollution is greatly reduced.

Water is the Lifeblood of Agriculture

An Interview with Dr Ji Chen and Dr Qian Xu, Department of Civil Engineering and Dr Mervyn Peart, Department of Geography, The University of Hong Kong

On May 11, 2014, Lai Chi Wo was severely flooded and the farms were all submerged, alerting the Sustainable Lai Chi Wo Programme's team to speed up the research on Lai Chi Wo's water resources and hydrology. We invited three experts from The University of Hong Kong – Dr Ji Chen from the Department of Civil Engineering as well as Dr Mervyn Peart and Dr Cho-Nam Ng from the Department of Geography, to form a research team with the aim of understanding the conditions of the Lai Chi Wo catchment.

"If there is no systematic hydrological monitoring in a place of agriculture, then science is not being applied. Science emphasises an in-depth understanding of things and such understanding is only possible with data and information. Lai Chi Wo was lacking in both of these. Before 2015, no one had conducted any hydrological observations on the whole Lai Chi Wo catchment. There was no data on rainfall, water level, discharge, etc. In 2015, we began carrying out site visits and collecting data." Dr Chen had previously conducted observations on the rainfall and runoff in some small catchments around Hong Kong, thus he was interested and confident in researching into the hydrological condition of Lai Chi Wo. The Lai Chi Wo hydrological research not only looks at historical data, but also collects new data to build a hydrological model for predicting future hydrological events. Dr Peart led site investigations, data collection and apparatus installation whilst Dr Chen and Dr Xu primarily worked on in-depth data analysis and simulation.

To solve the problem of flooding in Lai Chi Wo, Dr Chen contacted the then Assistant Director Pak-Keung Chan of the Drainage Services Department to encourage a joint



meeting between the Programme team and different government offices, including the Drainage Services Department, Agriculture, Fisheries and Conservation Department, Environmental Protection Department, Home Affairs Department, as well as Kadoorie Farm and Botanic Garden. "The Drainage Services Department specially sent engineers to conduct a site investigation in Lai Chi Wo, and discovered that the riverbank in the upper course of the major stream in Lai Chi Wo lacked maintenance, causing water to flow through the riverbank easily and flood into the farmlands. This was the primary cause of the 2014 flood." "Different government departments came to know about the Lai Chi Wo Programme because of the meeting, so if they come across matters about Lai Chi Wo later on, they already have an idea what it's all about." Dr Chen believes that such interdepartmental meetings with the government is an expedient mode of communication for both the future development of the Programme and other long-term developments in Hong Kong.

River basins in Hong Kong behave differently depending on rainy or dry season. During the rainy season, flooding occurs soon after it starts raining; when the rain stops, the water also recedes rapidly. As for the dry season, the water level becomes even lower than usual. These are the common characteristics of rivers in Hong Kong, and Lai Chi Wo is no exception. The catchment area (i.e. the area that collect rainwater) of rivers in Hong Kong is usually smaller than 1km², and streamflow is intermittent during the dry season. Lai Chi Wo has a catchment area of 2.5km², which is relatively large, thus the stream does not dry out easily in the dry season.

"There is a large Fung Shui woodland behind the village houses in Lai Chi Wo. Scientifically speaking, it is very helpful in protecting the village. The Fung Shui woodland can protect the soil and water, and prevent landslides and flooding. Landslide is a common hazard in Hong Kong but it rarely happens in Lai Chi Wo. The slope behind the Fung Shui woodland is relatively gentle, and the trees there are well-grown and deep-rooted, which stabilises the soil and prevents erosion. When there is heavy rainfall, the Fung Shui woodland stores most of the rainwater and prevents severe flooding. The stream in Lai Chi Wo experiences an apparent dry season with little water for around six months, so irrigation for terraced farming has to be sourced from upstream. Villagers therefore built a small weir near the fields to retain stream water. A small pond then formed behind the weir and it supplies water during the dry season. There is a tributary near the village houses to provide villagers with water for daily usage. Apart from an ancient well, other old water storage facilities were also built there. The village houses are located on a slope higher than the plaza, and there is an excellent drainage network across the houses. A deep stream channel is situated next to the plaza as



Lai Chi Wo is a low-lying village. The rehabilitated farmlands were swamped during rainstorms.

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well, so even if the plaza is flooded, the village houses are seldom affected. In the past, villagers kept the lower course waterway large and deep to quickly discharge water into the sea and prevent the village from being flooded. Unfortunately, many important flood prevention and water resources facilities have been rendered useless due to disrepair."

The first step in investigating flooding is to obtain rainfall data to build a simulation model to predict the magnitude of flooding. "Since there is no rainfall data of Lai Chi Wo itself, we bought from the Hong Kong Observatory rainfall data of the four stations nearest to Lai Chi Wo (Sha Tau Kok, Kat O and the two stations near the Plover Cove Reservoir), collected since 1985 at a 5-min time step, to do some systematic analysis." Dr Xu and the team investigated the rainfall intensity on May 11, 2014 and found that it was not particularly high over the past 30 years. It may only have been the fifth or sixth highest, but the rainfall amount three days prior (the "antecedent rainfall") was larger, leading to a relatively severe flood.

In civil engineering, it is important to find out the return period of a hydrological event (i.e. the probability of the recurrence of a hydrological event). Thus, they conducted an analysis from the catchment hydrology perspective to assess the severity of the flood, for example how large the stream discharge was (m³/s). They found that the return period of severe floods like the one on May 11, 2014, was around 3 to 10 years (it is impossible to get a precise figure as this is a hydrological study of an ungauged area), meaning that the recurrence is quite frequent. In 2016, the farmlands were flooded again after two typhoons struck Lai Chi Wo on October 19 and 21. This is in line with our prediction. After two consecutive stormy days, all the farmlands in Lai Chi Wo were swamped on July 24, 2017. Riverbanks collapsed in many places because of the flood. "This kind of heavy rain is very common nowadays in Hong Kong," says Dr Xu.

In 2016, the research team began another study in Lai Chi Wo to holistically examine the streamflow, sediments, turbidity and biodiversity. This study is the first of its kind in Hong Kong and is quite new internationally. "This kind of study can't be done in large river basins because the scale would be too large and require too much capital. The Lai Chi Wo catchment area is smaller and easier to manage." The hydrology research team and the ecology research team led by Dr Billy Hau are collaborating on a preliminary systematic study on Hong Kong's present and future ecology, hydrology, soil erosion and sedimentation as a whole and it is a very good start. The study is undoubtedly a cutting-edge scientific research in Hong Kong and the systematic approach is also internationally forward-looking.

However, collecting field data is never an easy task. The research team had continuous difficulty in gathering important data in rainstorms. "We need to collect rainstorm data on-site but we were always unable to accurately predict the exact time of heavy rain occurrence. Today (May 24, 2017), we finally got what we needed!" Another member of the hydrology research team, Dr Peart, is one of the few geographers in Hong Kong who still conducts outdoor research on a regular basis. "Today is very important because we experienced the Red and Black Rainstorm

warnings this morning, allowing us to see the changes in stream discharge and water level during rainstorms. The changes were rapid and we noted that the water level in particular rose very quickly. The streamflow carried a large amount of sediments and the water became highly turbid, but very interestingly, this phenomenon soon vanished within an hour after the rain ended! These explain how rainwater and high water levels bring soil from the river basin into the stream. Each rainstorm behaves differently, so we need to collect a great amount of data before we can generalise the change pattern. As the conventional approach of collecting data manually in rainstorms is very dangerous, we installed turbidity sensors and suspended sediment sensors in the water to observe changes in the stream during rainstorms, which is indeed very complicated. However, even though we are using more automated equipment, we still have to carry out regular check-ups and maintenance."



The research team had to collect sample data in the pouring rain.

Researchers have to experience the natural changes in the stream first-hand in order to help them think of new hypotheses and research directions. Dr Peart felt that this hydrological research can deepen our understanding of the hydrological system of natural catchment in Hong Kong, so that we can better respond to rainstorms as well as flooding and drought problems that occur more frequently, especially with climate change. "As the Lai Chi Wo catchment is very typical in Hong Kong, this hydrological study helped build a hydrological model for local catchments, and provide a better understanding of the sedimentation pattern in Hong Kong rivers and its relationship with farming activities. These are data that Hong Kong has been lacking."

Regarding problems with water resources and conservation, Dr Chen believes that the ecosystem of ecologically sensitive sites should be protected instead of being left unmanaged. "For humans to live harmoniously with nature, we have to consider human needs, not just ecological needs, otherwise the place will slowly fall into disuse and people will simply leave. If we do not dredge the stream, the channel will naturally be choked with silt. As it is a stream in a hilly area, sand and stones in the upper course will flow down along the stream and accumulate behind the small weir, causing the water level to reach almost full capacity. Since its function of water storage is weakened, the water will be insufficient to irrigate the farms. Therefore, it is necessary to dredge the stream. However, won't this move harm ecology? Yes, it will, but the damage is recoverable. The ecosystem has a high ability to restore itself as long as everything is done in an orderly and appropriate manner without laying the stream bed with concrete. Dredging and simple clearing must be done regularly."

As the Lai Chi Wo catchment is very typical in Hong Kong, this hydrological study helped build a hydrological model for local catchment areas, and provide a better understanding of the sedimentation pattern in Hong Kong rivers and its relationship with farming activities. These are data that Hong Kong has been lacking.

"Three Dous" (三斗種*) Community Farming

After Produce Green Foundation took the lead in opening up the initial farming area for re-cultivation in the first year of the Programme, we established the second farming area the year after. Given the size of the new farming area, we were able to incubate more community farms. Added to the University's researchbased farm, the "Three Dous" Incubation Scheme was established where the scheme seeks to provide training and assistance to indigenous villagers and individuals who aspire to join the revitalization work in Lai Chi Wo. The scheme would prepare them to develop community-based agricultural development. As of September 2017, seven small-scale farms have been established in the incubation area carrying out sustainable agricultural production and farmbased education activities. Their farm produce and products are promoted online and sold at the Lai Chi Wo Farmers' Market. In addition, a group named "Very Ginger", formed by indigenous villagers, new settlers and volunteers, is even putting the ideas of "local produce locally processed" into practice in Lai Chi Wo. This is indeed sustainable rural economy made manifest.

"Three Dous" community farms and producers:

- D & F's farm (紀強農場)
- MIND(心耕)
- Natural Space at LCW (自然空間)
- PermAmigo(綠續友徠)
- Senses of Nature (隨意農樂)
- Uncle Yi's Farm (二伯農場)
- Very Ginger (好夠薑)
- Ying Kee Farm (英記農場)

^{* &}quot;Dou" (斗) is a traditional agricultural unit related to rice farming. 1 dou is equivalent to 674m². The name "Three Dous" is used to describe small farms.



Natural Space

Keith Mak and Eugenia Pang



We are probably just following our hearts and trying our best to observe the course of nature without disrupting it. Keith and Eugenia moved to Lai Chi Wo at the end of 2013. They were the first batch of city folk who moved to the village. They opened up the fields, established their own farm and started their own small business. After three years of toiling, they are now officially settled, and considered true pioneers in Lai Chi Wo's farming rehabilitation and village revitalization.

At around five in the morning, after exercising in the plaza as usual, I jogged to the pier. The mist gently embraced the cerulean sky. I felt calm and completely at ease, and recalled how we've been spending our days living in Lai Chi Wo...

It is hard to believe that it has already been four years. It is our luck and perhaps also a fulfilment of our dream. At the beginning, we joined Chiu-Ying Lam's Lai Chi Wo guided tour because we wanted to pursue our life's dream. Later, we became farming rehabilitation pioneers of the sustainable development project and are now enjoying an autonomous life in our "Natural Space". Sometimes it feels like we are still in a dream, but it is definitely a dream come true.

We are proud of our courage in trying, and are thankful for all the encouragement and support from our dear friends. We cherish the opportunity of finding this piece of wonderland. We are grateful for all these!

Looking back, although we are pioneers, we do not feel like we have done anything great. However, to live our dream life, it does take quite a lot of perseverance, energy and courage to change our past habits. This place really is a paradise, albeit a secluded one. We have to get used to living a simple life of eating less and using less. We remember when we first arrived; we had nothing here and had to start everything from scratch. Finding a suitable workspace and warehouse, getting the Closed Area Permits, moving the materials, recruiting manpower, clearing the shrubs, opening up the fields, making agricultural records and writing reports... Although they were not complicated and difficult, we still found them challenging due to our lack of experience.

We usually have to farm under the scorching sun, but because of the continuous thunderstorms today, we took care of the odds and ends in the house instead. Water kept on dripping from the space between the roof tiles, and we were afraid that we might hear the noise of nearby dilapidated houses collapsing. Suddenly, we heard a strange sound and found a gecko preying on a mantis in a dark corner on the stairs, while the mantis itself was also holding a small insect in its mouth. Disturbed by us, the lizard fled. We set the injured mantis free on the grass outside our house, letting it continue to survive. We suddenly felt that perhaps this is how nature works – life and death, gains and losses all seem to be the arrangement of an unknown force.

A friend once asked us seriously, what sustainable rural life means to us. It was not an easy question. We are probably just following our hearts and trying our best to observe the course of nature without disrupting it. Take our concentric circle field and edible flower ice lollies as examples, we simply designed them randomly. At first, we just wanted to share what we love; later we realised it is more important to understand the relationships amongst people, as well as the relationship between man and nature. This may well be our ultimate mission!





The Bittersweet Experience of Farming

Fiona Kae



Establishing simple and genuine friendships in Lai Chi Wo (from left to right: Patty, Fiona, Ah Lung and Annie)

> Fiona has always enjoyed farming. Before joining the Sustainable Lai Chi Wo Programme, she had already accumulated more than ten years of farming experience abroad. After returning to Hong Kong, she took a few courses related to agriculture and obtained more experience through practice. She is now trying to grow various types of crops in Lai Chi Wo. Come rain or shine, she persists in taking care of her small farm. All of us greatly admire her earnest and diligent attitude!

With the introduction and encouragement from May, a farm manager at The University of Hong Kong, I participated in the Second Leadership Training Programme, and then joined the "Three Dous" Incubation Scheme. I am now jointly operating "D & F's Farm" in Lai Chi Wo with villager David Tsang. I have experienced the entire farming process, from opening up and weeding the field to planting and harvesting the crops.

There is no pressure to pay rent when farming here, and we have a lot of freedom in choosing the types of crops to grow; I thus have tried growing many different crops. It does not only satisfy my interest in farming, but is also good for ecological health. At present, there are more than 30 kinds of crops in my field. I am not looking for a stable income; I feel that I have already gained something if I have a harvest, and I am happy to share my harvest with others around me.

I have faced many challenges in running this small farm. The shortage in manpower makes the farm work more strenuous for me. Besides, it is absolutely not easy for the farming teams to coordinate the irrigation and drainage among the small farms. My farm is low-lying, so it often gets waterlogged when it rains. Thus, I have to pile the soil really high to plant the crops and adjust the combination of crops to cope with the relatively wet field. On the other hand, since the irrigation water that runs between fields through water channels are prioritised for farms located on a higher relief, after I transplanted the rice seedlings, I had to block the incoming water to let it irrigate the higher fields first, so my fields became quite dry and overgrown with weeds. I had to work extra hard on weeding. I began to understand nature's mighty force, and that farming depends on many factors working together, including timing, geography, and people's efforts. If we plant suitable crops according to the seasons, the environment, and the field characteristics, they can grow easily.

I always look forward to seeing the fruits of my hard work. I am particularly satisfied with my borecole and radish harvests, while my wax gourds and vegetable spaghetti harvests surprised me. Apart from experiencing farming, the landscape and environment of Lai Chi Wo have brought back my childhood memories of living in a village. I am also glad to have made a group of like-minded friends here.



Bending down to farm, Fiona gradually learned to be humble in front of nature, and live according to nature's course.

Farming Gold on Abandoned Lands? Story of Lai Chi Wo Ginger

May Chan, Farm Manager;

Jamie Wan and Ka-Sing Wong, Farm Officers, Policy for Sustainability Lab



Ginger produced in Lai Chi Wo

From abandoned lands to golden ginger powder, not only did the process add value to the agricultural produce, but at the same time, it created more opportunities for community participation. Many people thought that after decades of farmland abandonment, the soil must now be very fertile, ready for farming rehabilitation. What a huge misconception! The drainage and irrigation systems of the farmlands have long been dilapidated. Periodic floods have gradually washed away the original topsoil suitable for farming and replaced it with sandy and rocky soil from upstream. We are amazed at how nature's power virtually converted the 300-year-old farmland back to its original form in just 30 years!

The newly opened up farmlands are called "raw lands" in farming jargon. The antonym of "raw lands" is "ripe lands", which refers to farmlands being kept under continuous operation. The transformation from "raw lands" into "ripe lands" is a long process. Our "raw lands" in Lai Chi Wo contained many stones and we had to manually remove them one by one, otherwise farming machines could not be used and farm tools would break easily. There were also a lot of tree roots. You may think that there was no need for us to deal with the tree roots because they can decompose in soil, but this is only the case for small tree roots. Tree stumps do not easily decompose and can remain there for many years. With these roots and stones in the soil, it was impossible for us to start farming. Therefore, in the first year of farming rehabilitation, our colleagues, new farmers of the "Three Dous" Incubation Scheme, university interns, volunteers, etc. spent a lot of time removing stones and tree roots as well as digging ditches. There were no short cuts for such work.

The lands were finally tidied up but due to soil infertility and lack of manpower, not many kinds of crops were suitable for growing. Our farming team colleague May had experience in growing ginger before, so she suggested experimenting with ginger.



After going through the processes of planting, washing, slicing, sun-drying, processing and packaging, our turmeric products are ready for sale!

"We only have three people: Jamie, Ka-Sing and I, so we had to select crops which can adapt to barren soil, require less care and allow for a longer harvesting period. However, given the humid environment in Lai Chi Wo, we were not sure if we would succeed." In March 2016, we planted 15kg of seed ginger, including Chinese ginger, small yellow ginger (similar to Chinese ginger but spicier) and turmeric. We planted the ginger, weeded the ground and heaped on the soil. Although it was not too much work, we did not take any shortcuts at all. After nine months of intensive care from our three farming colleagues, the 15kg of seed ginger finally produced over 700kg of ginger, exceeding everyone's expectation!

Most local families probably would not be able to use more than half a catty of ginger in a month and do not know how to use fresh turmeric. It is difficult for us to sell the 700 plus kg of fresh ginger. Farmers then thought about making processed goods out of it because processed goods have a longer shelf life, are more convenient to use and simply more marketable. Yet, with only three pairs of farming hands, we could not handle both harvesting and processing. As the Sustainable Lai Chi Wo Programme attracted participation from ladies who like making handicrafts and are very concerned about food quality, we invited them to help with the processing. In December 2016, the "Very Ginger" processing team was formed, composing of seven ladies with high standards for food quality: Daisy, Thisbe, Maria, Susan, Qiushuang, Teresa and Ho-Ying. Among them, there are indigenous villager, new settlers, as well as trainees and volunteers of the Programme. Each member has her own strength, so the team is able to handle a wide range of work, including installation of sun racks, managing machines, experimenting, washing and sun-drying the ginger, making ginger powder, packaging, accounting, marketing and retailing. They suddenly changed from consumers to producers, turning pieces and pieces of fresh ginger into packs and packs of ginger slices, ginger powder and ginger soap. In doing so, they practised community supported agriculture.

From abandoned lands to golden ginger powder, not only did the process add value to the agricultural produce, but at the same time, it created more opportunities for community participation. "Community-farming-processing-selling" – will be the new direction of the rural agricultural development in Lai Chi Wo.

Lai Chi Wo Farmers' Market

The formerly deserted lands have now been transformed into several community farms, and we launched the first ever Lai Chi Wo Farmers' Market in early 2017! The market is open on the first Sunday of every month for our community farmers to sell their produce locallygrown in Lai Chi Wo. Visitors are welcome to browse the market and take away seasonal products and local souvenirs.

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Rural-Urban Interaction

Rural-Urban Interaction

Sianna Yiu, Project Officer, Policy for Sustainability Lab

Rural population decline is a global phenomenon. According to the world population data from the World Bank, the number of people living in rural areas was surpassed by the number living in urban areas in 2008. Hong Kong is one of the places experiencing the most serious rural population decline. Rural areas account for three quarters of Hong Kong's total land area and a number of people still live in villages, but except for the very few farmers and fishermen still engaging in primary production, the vast majority of villagers have cast away actual rural village life and should strictly speaking, be counted as an extension of the urban population.

Villages used to give people an impression of being backward and isolated, resulting in a desire for people to emigrate to urban areas or foreign countries to earn a living. However, the world has changed. After experiencing decades of rapid urbanisation, cities today are crowded and coupled with a stressful lifestyle, causing an increasing number of city folk to flee from busy urban areas and live in rural places. The reversed population movement between urban and rural areas has given abandoned villages like Lai Chi Wo an opportunity for revival: villagers who once left are returning to live in their home villages upon retirement. Born and raised in Lai Chi Wo, even after having built new homes abroad, they do not want their ancestral homes in the village to become dilapidated and farmlands to stay abandoned. These city folk who identify as indigenous villagers want to revitalize their home village but they do not have sufficient ability to do so. On the other hand, there is also a group of people who grew up in urban areas but highly appreciate the rural environment and traditional village culture. They aspire to protect Hong Kong's rural environment and culture, and even entered into related industries such as farming and conservation to practise green living. Although they are passionate and capable, they may not have enough resources. We therefore revitalize Lai Chi Wo by connecting these two groups of people with rural lands and establishing a rural-urban community to facilitate ruralurban interaction.

The community revitalization of Lai Chi Wo includes the following aspects. First, we have brought urban population to the village and re-established the customary resident population in the village: Both the urbanised indigenous villagers and city folk who decided to pursue an agricultural village life have been living and working in Lai Chi Wo regularly because of farming rehabilitation and village revitalization and have thus become the core members of the Lai Chi Wo revitalization community. Second, we have engaged many facilitators: the Programme has repeatedly carried out rural community development training and offered volunteering opportunities and internship schemes to encourage and assist enthusiasts in solving present difficulties and inconvenience associated with rural life. Third, we have recruited a lot of participants: the Programme attracted visits from students and the general public to learn and experience rural environment and its cultural value. The increased number of visitors has also brought about new possibilities for rural economic development. Many Hong Kong people go abroad to visit villages and experience the agricultural lifestyle, but in fact we have rich rural resources in Hong Kong too.

Support and services provided by rural areas are essential to a healthy city life. The rural environment unconditionally provides us with clean air, food and water from just the edges of where we city folk live. In the future, neither developing these vast rural green areas into new towns as with previous practice, nor letting them continue in their neglected state will help our city become sustainable. We need to re-explore the rural-urban interaction of Hong Kong and carve out a way to rural-urban coprosperity and coexistence for our city.



Pioneer Villager in Farming Rehabilitation

An Interview with David Tsang, Indigenous Villager of Lai Chi Wo



David has always been one of the staunchest supporters of the Programme. He personally dredged the silted stream, cleaned the village, organised guided tours, and even resumed farming. In 2010, upon retirement, David returned to Hong Kong from Germany. When he went back to his home village Lai Chi Wo and saw the deserted lands, he decided to pick up a hoe and start farming again. One day, he bumped into Chiu-Ying Lam in the fields. While they were chatting, David mentioned that he wanted to resume farming. The story of Sustainable Lai Chi Wo then began.

"When I came back to Hong Kong in 2010, I felt very sad to see all the fields overgrown with trees and weeds, and only one old couple staying at the village occasionally. If the old couple were to leave too, perhaps there would be no one left to care for the village anymore. After some consideration, I decided to move back. I stayed here for a few nights, sometimes completely alone when the old couple was away, which made me nervous too." Even a burly man like David was not at ease being alone in a remote, deserted village.

David is considered a pioneer in Lai Chi Wo's farming rehabilitation and village revitalization efforts. In the middle of his ancestral home hangs a plaque "Return to the Village". "Simon Tsang gave me his farmlands near the West Gate so that was where I began to till the fields. But it was strenuous work and my body ached all over from the physical exertion. I planned to borrow machinery from the Government, but then I realised that I have no idea how to transport them into the village, so I had to give up." Although his first attempt at farming rehabilitation was unsuccessful, it spurred the Sustainable Lai Chi Wo Programme into life.

David has always been one of the staunchest supporters of the Programme. He personally dredged the silted stream, cleaned the village, organised guided tours for villagers and new settlers, and even established "D & F's farm" with Fiona Kae to begin farming in Lai Chi Wo. He is very passionate about promoting Lai Chi Wo's landscape and culture. On Sundays and public holidays, he goes on duty at the Lai Chi Wo Geoheritage Centre and provides cultural tours to tourists. He also turned one of the village houses into an exhibition centre, showcasing décor and furnishings from the 60s and 70s.

"The Kaito service connecting Ma Liu Shui and Lai Chi Wo commenced on January 1, 2016, but at that time there weren't sufficient facilities and farming rehabilitation was conducted only on a limited scale. I was worried that tourists would be disappointed since it's a lot of effort to get here. I am sure these people are eager to learn more about the lives of villagers in the past. This house is the most authentic building in Lai Chi Wo and has not undergone any modern reconstruction. It is an excellent representation of village life in the old days."

"Tourists usually feel cool air upon entering the house and this will pique their interest. I would then slowly explain the traditional architecture of using roof tiles which helps with insulation and ventilation." Setting foot in the house, you will find the stove on your right and the shower room on the left. This is a typical layout of old village houses. "In the past, we wouldn't waste any resources. It was exhausting to collect firewood and it was also difficult to control the heat when cooking, so we made use of the excess heat from cooking to boil water for dishwashing and showering. The shower room does not have a toilet. Many kids are curious why old houses have no toilets. I explained that we collected faeces to be used as fertiliser!" David is an amazing storyteller. His explanations are lively and interesting. Since young, he has always been curious about the history and tales of Lai Chi Wo and he would listen to stories told by older villagers. Today, it is his turn to tell these tales to tourists and students.

Lai Chi Wo holds a special place in the villagers' hearts. They exuberantly reminisce about the village's scenery in the past, but they did not appreciate it back then. "The scenery of Lai Chi Wo was so beautiful that people called it Small Guilin (小桂林). But when I lived here when I was young, I only felt that it was the middle of nowhere. I had to go very far away just to watch a movie! But now looking at the old photos, I can really see how pretty it was." David lived in Cologne, a big city in Germany. "At first, I loved the vibrant cosmopolitan life, all the bars and discos, but as I got older, I began growing tired of it. After my daughter grew up, I brought her to Lai Chi Wo in the 90s. I remember her saying 'sehr schöne' (meaning 'very beautiful' in German) and refused to leave the pier. It was at that moment when I finally began to appreciate the beauty of my home village."

"Honestly speaking, I've actually forgotten what Lai Chi Wo looked like in the past. Although I came back every year, everywhere was full of weeds. However, one day I saw an old aerial photo of Lai Chi Wo brought by a geography student surnamed Leung, all my memories came flooding back. It wasn't only me. When Uncle Yi (Lai Chi Wo villager Sun-Wah Tsang) and others who have emigrated to the UK for decades saw that photo, they could point out the exact locations of the salty paddy fields and Fan Shui Au. They remembered every place vividly!"

David was a civil servant in Germany and had many holidays, so he often went travelling. His abundant travelling experience has made him



David introduced tourists to Lai Chi Wo's past landscape at the Geoheritage Centre.

After my daughter grew up, I brought her to Lai Chi Wo in the 90s. I remember her saying "sehr schöne" (meaning "very beautiful" in German) and refused to leave the pier. It was at that moment when I finally began to appreciate the beauty of my home village.



Stepping on the newly rehabilitated farmlands that had previously been abandoned for decades, David and a group of villagers who returned from overseas could hardly contain their excitement. realise the preciousness of Lai Chi Wo. "Lai Chi Wo is close to the urban areas, only a two to three hours' hike from Tai Po city centre. There are many village tours and ecological farm tours out there, but you will see modern structures. Lai Chi Wo is different, here we can live in old houses and drink the sweet natural water collected directly from the hills! Authenticity is really important. Take the Hakka braised pork as an example, whether it's cooked with petroleum gas or firewood, you may not be able to taste the difference. But once I tell you it's cooked with firewood, you'll feel it's particularly delicious. This is because you know you're tasting flavours from the past!"

"Hong Kong is a small place and land is scarce, yet this village can still maintain its authenticity. In the eyes of foreigners, perhaps Hong Kong only has skyscrapers, but if tourists have finished sightseeing in the city centre and want to hike in the countryside, Lai Chi Wo is their ideal destination." In the tiny city of Hong Kong, one can appreciate landscapes and lifestyles that are polar opposites. This is what makes Hong Kong and Lai Chi Wo unique and irreplaceable.

David admits that he is very traditional and prefers everything to be kept original and unchanged so that the authenticity of Lai Chi Wo can be maintained. "It's best if the village can be kept the same when our future generations come back 50 years later." He said he has seen Hakka villages in the Mainland sold to developers and they were completely destroyed without a trace left. It is just such a sad thing that the younger generations have lost their roots.

David thinks that the new settlers here are very rule-abiding. They have helped liven up the village and restore its original appearance. There are also people farming. Villagers would not object to the rejuvenation of the village. David hopes that Lai Chi Wo can be preserved for future generations to see. However, the next generation of the villagers are mostly living abroad and are unfamiliar with Lai Chi Wo and even Hong Kong. Would David worry about this? "No!" David firmly replied. "It's fine even if they don't come back. We are living in the age of technology, they can go online to see Lai Chi Wo. I've always been confident in Lai Chi Wo because the location was carefully selected by Fung Shui masters. In terms of Fung Shui, having a large hill or mountain signifies strong support for the village, allowing it to sustain and leave behind a long history." Regarding the future of Lai Chi Wo, David gave an authentic, village-style answer.

Passing on Hakka Traditions

An Interview with Susan Wong, Indigenous Villager of Lai Chi Wo

Susan left Lai Chi Wo in 1965 and emigrated to the UK with her father at the age of 14. 50 years passed before her return to Hong Kong on June 9, 2014 to take care of her ageing parents. Her original plan was to stay for two months, but this has extended into three years at this point.

"I decided to remain in Hong Kong and Lai Chi Wo in particular, mainly because of my parents but also because of the new villagers. We live and work together happily and the village is a much livelier place now."

Susan, commonly known as Sister Kwan-Ying, had been living in the UK for over 50 years and occasionally returned to Hong Kong. But this time it is different. "I remember after coming back to Hong Kong, I went back to the village with the village chief one day and bumped into Mr Mak (Keith Mak) and Ms Pang (Eugenia Pang) who had just moved into the village for farming. I found it strange, so I followed them to the fields. They were really farming! Later I joined a docent training course with David (David Tsang), and met Miss Chick, May, Monti and others. We even took walks across villages and went hiking together. Everyone in our group is friendly and like-minded, and we are sincere in helping Lai Chi Wo. In the end, we even got graduation certificates!"

At first, we did not know much about Lai Chi Wo, so guidance from villagers was crucial. The docent training course provided a golden opportunity for indigenous villagers and new settlers to interact. Indigenous villagers described their life in the past, while new settlers shared their reasons for moving here. Everyone became close right from the start.

"It must be exhausting for you to cultivate the fields! The 'Fu Yong' fields weren't used for growing paddy in the past because the water was too deep. You've picked the wrong fields!"

Other than telling us about farming in the past, Susan also brought us around the hills to learn about medicinal herbs. She said she did not know much about their medicinal properties, so she would bring them home for her mother to identify. The knowledge which old villagers possess is truly a treasure.

Susan currently lives on Chung Ying Street in Sha Tau Kok with her parents, and stays overnight in Lai Chi Wo on holidays to make Hakka Cha Kwo and sell them locally. On regular days if there are visiting guests, she will return to the village to cook for the students and volunteers and take the

Susan went uphill and gazed at the scenery of her home village. An unexplainable joy came over her.



Susan was preparing a special Hakka dish "Lai Vok Bien" (瀨鑊邊) for volunteers who came to the village.

opportunity to clean her ancestral house and take care of her small farm. For her, going back and forth every week is enriching and enjoyable. "When I was young, life was hard and we were poor. I am the eldest daughter and had to take care of my younger siblings from a young age. My clothes were always dirty and I didn't even own a pair of proper shoes. I only wore socks for the first time in my teens. I hated Lai Chi Wo as a child and wanted to escape. When Dad said he was bringing me to the UK, I was exhilarated."

We find it funny that Susan has become very British. She cooks Hakka food for us but eats steak and drinks tea with milk on her own. However, her mentality has changed quite a lot between the time she left and now. "After living abroad for so many years, I don't think it is that great to live overseas either. The UK also has her own problems. Before, I couldn't go to school and I had no opportunities or options in Lai Chi Wo. If I had stayed here, I would probably have ended up marrying a farmer so I had to go abroad. Now it's different. My kids are grown up and I don't have to worry about my livelihood. I'm staying in Lai Chi Wo doing all these not to earn a living but for my own personal interest. I'm old now. This place is still my home and I have friends and freedom here. My only concern is my parents' health."

"In the past, there was nothing in our house, but now there are lights and electric fans. It only takes a flick of the switch to turn them on. How convenient! After toiling overseas for decades, it feels great to come home, cool down under the fan and live without worrying about putting bread on the table. In addition, I love the sea, and can frolic by the seaside. With the newcomers in the village, I now have people to chat with and cook for. Going around alone is boring and scary so having neighbours around makes me feel a lot more secure. I can even spend the rest of my life here."

Susan's family is very supportive of the revitalization of Lai Chi Wo. She says that it was indeed because of these outsiders that indigenous villagers began considering how to revive the village. "Villagers are now actively handling village affairs because if we let the village be, the entrances and footpaths will very soon be encroached by weeds and shrubs. Houses will collapse and eventually there will be nothing left." "I want to do all I can to preserve the village while I can still see it. Even though my mother cannot come back to the village because she has difficulty in walking, she still misses the ancestral home and asks me about the village every day. This is where our family grew up and where our ancestors lie resting. We built this place through hard work and with our bare hands. I hope that the paddy fields, farmlands and houses can be well-kept for the rest of my life. I hope that the entire village can stay lively with its centuries-old traditions kept intact. For our generation, we still want to come back after we retire, but the next generation won't do the same." The next generation of Susan's family, like that of many indigenous villagers, has never lived in Lai Chi Wo. Their home is in the UK and they have no feelings towards Lai Chi Wo. Susan's generation understands the challenges but could only let things follow their natural course.

Susan and her fellow villager Sister Ying-Zai make Hakka Cha Kwo in Lai Chi Wo which they enjoy doing. "If I were doing it for the money, I'd rather be a cook in the UK as it'd be more profitable." "Nowadays, as long as I am able to, I am happy to come back to cook and make Cha Kwo. I do complain when it gets too hot or tiring, but deep down I'm very happy. It gives me a small income so I don't have to dip into my savings and I can still buy things for my parents with the money I earn. In the process I help others too as tourists can snack on it when they come to Lai Chi Wo. When people compliment me on my Cha Kwo, I'm happy too."

Besides selling Cha Kwo, she has also begun teaching urban visitors how to make them. She has taught students, tourists and consuls of many countries, and even promoted Hakka snacks at different schools. "I remember using the old mortar and pestle as well as firewood to make Cha Kwo at home for the first time. It was very tiring but everyone ate them happily even though there was some sand in them. It's funny just thinking about it." "At first, I didn't really think about cultural inheritance, and also didn't expect city folk to be interested in learning to make Hakka Cha Kwo. Now the traditional flavours have come back, I really feel that I played a part in it while earning money at the same time!"

Susan, who received her Senior Citizen Card two years ago, is able to introduce Hakka Cha Kwo to visitors while making it. Whenever someone says, "Thank you, Sister Kwan-Ying", she is the happiest. At least someone appreciates her food, she said.



Susan was in the village teaching scouts how to make Hakka Cha Kwo.

This is where our family grew up and where our ancestors lie resting. We built this place through hard work and with our bare hands. I hope that the paddy fields, farmlands and houses can be well-kept for the rest of my life. I hope that the entire village can stay lively and with its centuries-old traditions kept intact.







Old Community, New Energy

The two phases of Lai Chi Wo Rural Community Development Programme attracted enrolment from some interested city folk. Through a series of onsite tutorials and practical learning sessions, the programme offered our participants an ideal opportunity to appreciate what nature has to offer, along with other learning activities with local farmers and villagers. After joining the programme, some of the participants even settled down and started living a simple life in Lai Chi Wo. Over the past few years, they have travelled back and forth between the urban and rural areas, thereby not only experiencing a rural lifestyle, but actually becoming part of the community. These people are the genuine practitioners of rural revitalization.





Let our Son be a Peasant Boy

Adley Tsang, Maria Wan, and Zachariah Tsang

Nowadays many think that only retirees would move to such a remote village like Lai Chi Wo. However, this small family comprising a young couple and their toddler bucked convention and moved to Lai Chi Wo a year ago. They spend three to four nights out of the week in the village and have adopted a simple lifestyle. Today if you ask Little Zach where his home is, he will answer with a smile, "Lai Chi Wo!"

We backpacked around the world for two years after we got married. We had been increasingly drawn to the village lifestyle, so we joined the leadership training programme with our six-month-old son, who had never been away from us. He was piggybacked to the village. When the training ended, we considered adopting a "Half-Farming, Half-X"* lifestyle. Being full-time parents, we care about food safety, the environment that our child's growing up in and our spiritual well-being, so we decided to move to Lai Chi Wo "part-time". We were the first "new villagers" to move in with a child. Zach's cries and laughter definitely bring liveliness to this tranquil village.

We joined the "Three Dous" Incubation Scheme and named our small farm "PermAmigo" (緣 續友徠) which signifies a green lifestyle, engaging in sustainable farming, making friends and attracting them to come. The farmland allocated to us, around 14,000ft² in size, became our experimental site of permaculture. Through natural means, we hope to improve soil quality and enhance the sustainability of the farmland, for instance, through composting and not removing weeds completely. We also hope to offer a healthy living space for visitors to refresh their souls, heighten their senses and physically connect with the land. We advocate a lifestyle with a healthy diet, strong connections to the land and with nature as the focal point. To this end, we have also held farming activities for city folk to go into the fields and experience rice seedling transplanting, crop harvesting, scarecrow designing, etc. Adley has been helping



with guiding ecotours and he mainly focuses on farm work. When Zach prefers not going to the fields, Maria's work revolves around the "Very Ginger" processing team and doing research and development with her own produce. She stays at home with Zach, doing housework, thus sometimes leaving Adley alone with the farming tasks. We always welcome volunteers joining us to experience farming. You will feel reaffirmed with your existence when you sweat into the soil, and be amazed by the incredible vitality of the plants (including weeds!).

We have only been farming for a year so we still do not have much experience. We do not apply fertilisers and are still nurturing the soil and frankly did not have very good harvest. However, even after we have taken our daily needs from our farm, there are always crops available for the day after. We are experiencing Jesus' words: "So do not worry, saying, 'What shall we eat?' or 'What shall we drink?' or 'What shall we wear?' For the pagans run after all these things, and your heavenly Father knows that you need them."

In our experiments, whether it is the rice undergoing fermentation for culturing IMO^{**}, the compost we made, the corn and sweet potatoes we grew, or the papaya and banana seedlings we planted, we have to "pay taxes" to the wild boars. It is really infuriating and funny at the same time! They are the real indigenous villagers!

Although urban development is important, it should be balanced with rural development. A village without farming is lifeless. Humans and nature connect, so it is essential to produce local organic fruits and vegetables, and conserve biodiversity and forest areas. All lives on Earth are inter-connected. Sustainable villages are the root of urban life, without them the city is simply an unrealistic vanity fair. Witnessing the bodies and minds of my friends in the city becoming involuntarily polluted, we really want you to know that alternatives do exist. We hope that sustainable villages can become a gentle force in changing the cities. More children can become peasant boys and girls, running on the hills, climbing trees, able to recognise edible fruits and plants, and swimming in streams. They will learn to cook with firewood, be curious about nature, protect the environment, respect life, cherish food and have a real childhood. Living near the soil is the first step to a holistic life with a healthy body and mind. We cannot achieve sustainability unless we have a next generation like this!

We hope that more children can become peasant boys and girls, running on the hills, climbing trees, able to recognise edible fruits and plants, and swimming in streams. They will learn to cook with firewood, be curious about nature, protect the environment, respect life, cherish food, and have a real childhood.

^{* &}quot;Half-Farming, Half-X" refers to a simple lifestyle with half of the time spent on farming for a safe food supply, and the other half using one's talents at work to support oneself. It originates from the book "A Lifestyle of Half-Farming, Half-X" (半農半 X 的生活) by a Japanese writer Naoki Shiomi.

^{**} IMO (Indigenous Micro-Organisms) refers to beneficial microbial communities that grow in soil or on living things. These microorganisms can help biodegradation, nitrogen fixation and enhance soil fertility. They can be collected from nature and are present after culturing.

Support by Backing Up

Daisy M Li



 I am very happy to work with my three fellow groupmates in the "Three Dous" Incubation Scheme!
 My beloved dogs Caesar and Yau 77. Both of them are from Lai Chi Wo and my time with them is truly unforgettable! Daisy is an energetic retired bank employee. She grew up in a village and has always enjoyed the rural spaciousness. The paddy fields in the old days have left a deep impression on her, hence she missed her joyful village life even after leaving it. She believes that not all villages in Hong Kong should be developed for housing and hopes that some villages can retain their rural uniqueness. Knowing that the lands in Lai Chi Wo have not been sold to developers, she feels there is a chance to keep its rural characters intact, so she enthusiastically participated in the Programme.

I have always loved planting, so I wanted to take part in the farming rehabilitation work in Lai Chi Wo. When the "Three Dous" Incubation Scheme was launched, I wondered if some local produce could be grown and sold to outsiders (but I have never thought of doing it for money). When Monti, whom I met in the Lai Chi Wo leadership training programme, invited me to join her paddy farming group, I accepted. After retirement, I no longer want to be involved in activities that demand too much mental effort, hence it is my teammates who take care of all the tedious planning work while I contribute my manpower when needed. In this manner, we have successfully grown several crops of rice. When the "Very Ginger" team was set up to handle the rich harvest of ginger and turmeric in Lai Chi Wo last year, I was invited to join the team to turn the harvest into products that can be consumed by the public. Since there is a group of people willing to take the lead, I am happy to do my best to back them up.

Undoubtedly, the most significant impact the Programme has on me is my involvement in fostering the village dogs. As I have time and space, my home has gradually become the "Rehabilitation Centre" for the ill and wounded village dogs. At its peak, there were seven to eight village dogs staying at my home. Although taking care of them is exhausting, I am glad that they are now healthy and I hope that Lai Chi Wo visitors will find them to be handsome-looking dogs.

To me, a sustainable village is one that let people live in the village houses without requiring them to buy the property and the villagers can farm their own food. When one's produce is not sufficient or lacked diversity, they can exchange with their neighbours. I think it is difficult to build a sustainable village in Hong Kong because there is so much imported agricultural produce sold at a low price. Local agriculture produce requires significant effort and costs. If they want to make a living from what they have grown, the produce can be very expensive and thus uncompetitive. I do hope Lai Chi Wo can overcome all the difficulties and become sustainable.

Joining the "Very Ginger" Processing Team

Teresa Tsui

Teresa has always been deeply interested in local production. She returned to Hong Kong last year after a working holiday in Australia, and was persuaded to do volunteer work in Lai Chi Wo. Soon after she got involved, a local ginger brand was surprisingly created.

Last December, my six new friends and I formed the "Very Ginger@Lai Chi Wo" experimental team to look for different possibilities for the ginger produced in Lai Chi Wo. Our group consists of indigenous villager, new settlers as well as volunteers. We enthusiastically discussed among ourselves and very quickly proceeded from talking about our vision to taking real actions of sun-drying and slicing the ginger. Actions speak louder than words. Any ground-breaking idea must be followed by actions to find out if it works. Our little boat has seven "motors" (there is also an external motor at The University of Hong Kong). Although it inevitably would go on a rampage, the impetus is seven times larger than exploring on one's own, and we would never feel lonely at sea. It is a humble idea to make agricultural products that we find good, but we also wish to connect farmers with citizens through our experiment.



Sun-drying ginger slices with teammate Susan (left) in Lai Chi Wo.

As processors and salespeople of agricultural products, we have not really worked in the fields to become farmers. But ever since joining "Very Ginger", we have become part of the local agricultural field.

My "Very Ginger" teammates (from left to right): Maria, Qiushuang, Ho-Ying and Daisy



In Search of a Way Out for Rural Development

Raymond Wong



Raymond (first from the right) and two other oral history collection volunteers took a group photo with their interviewee San-Wah Tsang, an indigenous villager of Lai Chi Wo.

Raymond is a young man in his early thirties and he works in insurance. His mother is a villager of Mui Tsz Lam, and his uncle is the village chief there. He lives and works in urban areas, but has always been concerned about Hong Kong's rural development, hoping to find a solution for it. Although his work and life keep him busy, he still made time to join the Programme.

Time flies, without realising it, I have already joined the Programme for around three and a half years. My uncle is the village chief of Mui Tsz Lam and has long been paying close attention to the development of Lai Chi Wo, Sha Tau Kok and North East New Territories. Many people thought that I knew the story of this area very well. However, my understanding of my mother and uncle's home village came mostly from my mother's isolated words and phrases, my experience of joining the Tai Ping Ching Chiu Festival for a few times, plus my own imagination. My impression of Lai Chi Wo was that it was a poor and remote village with poor accessibility. Except during the Tai Ping Ching Chiu Festival, this place was a deserted and dilapidated village with overgrown weeds. Villagers had never thought of its sustainable development.

However, changes started four years ago. At that time, there was a heated debate on "incorporating private rural lands into country parks". Villagers and the Government had their own views and each side stuck to its own argument. I think the root cause of this issue is that rural lands could not be sustainably developed in an effective manner in the past so the Government had to rezone them to regulate their use. Thus, I became interested in ways to make effective use of rural lands and started researching into different feasible models of sustainable development, hoping to find a way out for rural land development.

It was quite a coincidence that soon after, scholars in the society launched the Sustainable Lai Chi Wo Programme, which happened to match my thoughts. Moreover, the Programme was conducted in my mother's home community, so I took advantage of the proximity and signed up for the Programme immediately. I then began experiencing and learning how to revitalize a village and sustain its development.

During the initial stage of the Programme, we focused on farming rehabilitation: removing tree roots and stones from the fields, digging ditches, turning the soil, transplanting rice seedlings, weeding, etc. Now in retrospect, it was as the Chinese poem goes "sweat dripping onto the soil" and "every grain of food is the fruit of hard work".

In the middle stage of the Programme, I mainly participated in cultural conservation works. The oral history collection experience was particularly unforgettable. Villagers told us about their own experience in the past – how they had to leave the place where they studied and grew up, emigrated overseas to earn a living, and only had the chance to return to live in Hong Kong and their home village in their later years after retirement. The hardships involved are not something city folk who live a rich material life can ever comprehend.

The Programme is already bearing fruit and should now move on to consider its economic effectiveness, so that it can progress sustainably. Programmes with long-term economic losses can only operate with subsidies from other channels, but this is not a healthy and sustainable way of development in the long run.

Looking into the future, sustainable villages should be developed based on locally available resources. It is necessary to make good use of and coordinate local resources (including ecological, cultural, and human resources, etc.), establish an effective management system, and provide goods and services that are in demand in the society. Sustainable development can only be possible through making a profit and reinvesting it.

Finally, I hope to take this opportunity to express my gratitude to my family and my wife for their support and understanding, as well as for always accompanying me to do volunteer work in Lai Chi Wo. Thank you!



"Incorporating private rural lands into country parks" – Villagers and the Government had their own views and each side stuck to its own argument. I think the root cause of this issue is that rural lands could not be sustainably developed in an effective manner in the past so the Government had to rezone them to regulate their use.

Appreciating Village Culture and Wisdom

Annie Ng



I cooperated with paddy farming classmates and successfully harvested the rice we grew in Lai Chi Wo. Each grain really took us a lot of hard work!

Annie is an energetic lady interested in everything from agriculture and local culture to ecology and geology. She has actively participated in cultural and environmental conservation volunteer work organised by different organisations for many years. She is an outstanding leader and tour guide in the Sustainable Lai Chi Wo Programme. Whenever she guides a tour, she always enthusiastically prepares the materials beforehand and gives interpretations to participants in a lively manner.

Three years ago, my younger sister and her family joined a paddy field farming workshop in Long Valley and I helped out occasionally. I bent down to transplant rice seedlings for the first time and became like a mud duck in the field. Happiness came so naturally! In April 2015, the chance to stay happy came again because through luck I became a trainee in the second round of the Lai Chi Wo revitalization leadership training programme.

Other than theoretical classes, students had to go into the fields in every session and practise using different tools. At the end, we even had to split into groups to plant a late crop of paddy and practise the entire process of growing rice. 32 students of different backgrounds communicated ideas and resolved conflicts together, went through a run-in period and finally collaboratively produced golden brown rice – truly the fruit of our hard work. That was how I produced my first kilo of self-grown rice. Farming is not easy at all. Farmers try their best but often results are beyond their control.

In May, I joined the 2-day-1-night "Hakka Culture Experiential Course". The walled village is characterised by crisscrossing lanes (three vertical and nine horizontal) and over 200 village houses, reflecting how populated the village was in the past, and even the nearby hills were once all covered in terraced fields. When we walked past those neatly arranged village houses, it was as if time had stopped and we could travel freely across time and space. Some village houses have their walls covered with ceramic tiles arranged in patterns common in the 60s, and their iron windows decorated with fashionable patterns on the glass. There are also some century-old houses with green brick walls and tiled roofs. The ground outside the front gates of these old houses is paved with granite slabs. The stove and pestle, which are two

important tools of the Han people, are still preserved inside the houses. Pots and bowls of different sizes are all over the floors of collapsed houses. The bells of history rang once again and reminded us that the Hakka people in Lai Chi Wo faced the same situation as their ancestors who had to migrate to other places. It took them the same perseverance and courage to face the different challenges.

The most impressive part of the course was the restoration of four old buildings in September. Our experienced teacher Brother Chi led a group of experts in the restoration work. They worked non-stop at height, even under the burning sun. The north wall was rebuilt using traditional methods and locally sourced materials. After mixing rice straw, brown sugar, oyster shells, sand, mud, and lime together, the mixture was poured evenly into formworks and pounded with wooden stakes manually to form the wall. We really have to admire the wisdom of ancient people!

In September, I also joined the "Nature and Culture Tour Course" which allowed me to connect with this beautiful place. Setting off from Ma Liu Shui, the boat sailed along an ancient channel, which has also seen the sweaty and bloody history of Tanka people collecting pearls all those years ago. The 400-year-old Hakka village is also an important manifestation of Hong Kong history.

To me, a sustainable village lifestyle means moving from a fastpaced, noisy and annoying urban life to a tranquil and simple rural life; slowing down our footsteps to enjoy a better quality of life and awakening our senses through farming. We also need to understand the characteristics of different animals and plants, rebuild the symbiotic relationship between human and nature and create and maintain a small eco-friendly farming rehabilitation community. The north wall was rebuilt using traditional methods and locally sourced materials. After mixing rice straw, brown sugar, oyster shells, sand, mud, and lime together, the mixture was poured evenly into formworks and pounded with wooden stakes manually to form the wall. We really have to admire the wisdom of ancient people!



Promoting Conservation through Soil Art

Ivy Wong



I think a sustainable village should strive for self-sufficiency as far as possible, and should have a diverse economic structure (not only relying on tourism) as well as a strong neighbourhood relationship (which is lost in the urban areas). Ivy is a university student in her twenties. She has been passionate about science and nature art from a young age, and has spent many weekends over the years learning to paint. At The University of Queensland in Australia, she studied Environmental Science and developed a deep interest in soil. After returning to Hong Kong, she joined the "MIND" farm project. She originally helped with the farm work, but with a stroke of inspiration, she combined environmental education and painting through soil art.

I care about community building and environmental protection, so after learning about the scale and sustainability of the Programme, I joined the first round of training. I thought I could contribute with my life experience in Australia and my knowledge from university, but when I really began working on-site, I kept hitting roadblocks and it seemed like I could not handle anything. I like plants and animals but could not identify them by species. I was not physically fit enough to handle the farm work. I wanted to stay overnight in the village but could not get a good night's sleep. At first, I experienced more frustration than happiness, but I knew I could not trap myself in urban areas. I longed to have elements of the countryside and nature in my life. Later, after listening to others' advice, I slowly accepted my shortcomings and decided to wipe the slate clean, and start learning humbly instead of pushing myself to accomplish something beyond my ability. Disengaging myself from my frustrations, I tried to engage in soil conservation and other environmental education work. With the support from staff and my groupmates, I launched the soil art workshop and was finally able to combine my interests and knowledge in a concrete manner. I am filled with satisfaction whenever I see children and even adults painting happily on the ground. I hope I can continue to develop different educational activities in the future to reconnect city folk with the land.

Regarding Lai Chi Wo's future, I am concerned that it might become over developed. I think a sustainable village should strive for self-sufficiency as far as possible, and should have a diverse economic structure (not only relying on tourism) as well as a strong neighbourhood relationship (which is lost in the urban areas). In the village, we often have meals with others, leave our doors wide open and chat at each other's place. These are what impressed me the most. Even though there will always be a distance between utopia and reality, the Lai Chi Wo community has already become a part of my personal life.

Fascinated by Hakka Embroidered Bands

Helen Leung

Helen originally worked in the socks manufacturing industry, and she is particularly interested and talented in knitting and sewing. Ever since coming across Hakka embroidered bands in Lai Chi Wo, she became curious about them and took knitting classes to learn to make them. She said that the embroidered bands were an important accessory for traditional Hakka women and the bands from different regions have their own distinguishing features, but the knitting techniques are on the verge of disappearing. She hopes to pass on this traditional craft and is trying to find out the unique patterns of the Hakka embroidered bands in Lai Chi Wo.



There is an old Hakka lady in Lai Chi Wo whom I always saw wearing a black headscarf (Hakka people call it "Bau Teu Zai" – 包頭仔). On the black headscarf, there was a white band with patterns knitted in red. Tassels hung on the two ends of the band as decoration. This was the first time I saw the Hakka embroidered band.

I sought help from villager Susan to learn about the history and the knitting techniques of Lai Chi Wo's embroidered bands. She saw her mother knitting them when she was a child, but she had never made them herself. Susan's mother is over 90 years old and has not knitted embroidered bands for decades. "Does your mother still remember how to make the embroidered bands? Can we record this disappearing craft?" I mustered up the courage to ask. Susan's mother was very supportive of our work and quickly agreed to demonstrate how to knit the embroidered bands.

I then went to Man San Tong in Sha Tau Kok with the staff of the Programme, bringing photo and video equipment with us to record the whole process. Susan came with her mother that day. When Susan's mother saw me holding a cardboard with threads wrapped around it, she said, "We don't need that! Give me the threads." She spoke in Hakka and Susan interpreted. Susan's mother took the threads, placed a stool in front of her, put on a waist band and fixed the bamboo sticks to the waist band and stool, and then deftly tied the threads to the bamboo sticks as preparation. "This is called 'Bat Gung Teu' (八 公 頭), and is used to pull the threads up and down for knitting," she explained while knitting. I do not know Hakka, but as she knitted each row, I could understand her from the way she picked and pulled the threads. Within an hour, she had already knitted half a band, and told me to finish the rest at home. She knitted with consistent force so the patterns were neat and the band was sturdy. Had I not seen her at work, it would have been almost impossible to imagine that the band was made by a lady in her nineties.

This was an invaluable opportunity for me to witness Lai Chi Wo villagers' amazing craftsmanship in knitting embroidered bands. I admire Hakka women's intelligence in using simple tools like bamboo and wooden sticks to pull the colourful threads up and down just like a sewing machine and producing patterns that they have in mind.



- I became interested in Hakka embroidered bands after seeing the headscarf decorated with embroidered bands worn by an old Hakka lady in Lai Chi Wo.
 Susan's mother fixed the
- Susan's motion fixed the bamboo sticks to a waist band and stool, and then deftly knitted the Hakka embroidered band using a simple wooden stick.

Unforgettable Time in the Village

Regan Li



Regan is a retired bank employee. She is interested in butterfly ecology and organic farming and has enthusiastically participated in environmental conservation activities organised by different institutions. She has undergone many kinds of training and is now an important volunteer in the Programme.

I first heard of the Sustainable Lai Chi Wo Programme at the end of 2013 and my relationship with Lai Chi Wo started when I joined the Programme's volunteer photography team in early 2014.

In July 2014, I helped to videotape the first rice harvest in the village after farming rehabilitation had begun. Temperatures were above 30°C on that day and even the video camera went on temporary "strikes" because of the heat. However, I saw many volunteer farmers from the city bearing the heat and diligently helping with the paddy harvest. It left a deep impression on me, as it felt like we suddenly went back in time and the daily agricultural life of Lai Chi Wo villagers in the past flashed before my eyes.

After hearing about the second round of the "Rural Community Development Programme", I joined it in April 2015 as well. The programme allowed me to experience a farmer's life in person. For example, when I stepped barefoot into a paddy field for the first time, countless little insects jumped out from the field. During training, we often had to stay overnight in Lai Chi Wo and the female trainees all squeezed into the attic of a village house to sleep and we chatted together before sleeping. We also learned to make Hakka Cha Kwo from the villagers with locally collected materials and assisted the villagers in preparing meals using their big woks. All these formed an authentic village experience!

I also joined tour guide training during the practicum and have since become a supporting volunteer in the "Three Dous" Incubation Scheme. I communicated more with villagers and thus gained a deeper understanding of Lai Chi Wo's past and present. After spending so much time in the village, I have even felt that Lai Chi Wo has become my second home!

Over these years, I have witnessed Lai Chi Wo's significant transformation. With on-going farming rehabilitation and the improved accessibility, more villagers and urban farmers have moved in. With more tourists being attracted, the settlers can be assured of a certain level of income. The village ecology, culture and history have been conserved as a whole, and the concept of sustainability is being gradually put into practice. These are all hard-earned accomplishments!

I believe that if we can promote the concept of sustainability to the next generation of villagers, earn their recognition and increase their sense of belonging towards Lai Chi Wo, the village's future is promising!

Gaining Far More than Expected

Patty

Patty is an energetic secondary school teacher. Other than juggling work and family, she often joins activities related to local culture and environmental conservation on her days off. She enthusiastically took part in the Sustainable Lai Chi Wo Programme's training and services and is passionate about sharing with others what she has learned. Those around her are naturally affected by her infectious positivity.

I like farming in my free time but had never tried growing paddy before; my main reason for joining the Sustainable Lai Chi Wo Programme was to learn to grow paddy. Over the three months of training, I understood the trials and tribulations of paddy farming as I went through the processes of preparing the farmland, germination, transplanting seedlings, weeding, irrigating and fertilising the land, harvesting, threshing, etc. In addition, the weather was unpredictable, so harvests could not be guaranteed! I realised that being a farmer is definitely not simple, as it involves so much infinite wisdom that I could never finish learning.



Another reason I joined the Programme was to learn about Hakka culture. My mother often says that she is Hakka, and my maternal great-grandmother was even a Hakka from Sha Tau Kok, but my mother did not grow up in a village, so she does not have much traditional Hakka life experiences, save for some bits and pieces of memories. After joining the Programme, I am glad that I could chat more with my mother about the characteristics of Lai Chi Wo's Hakka village and the stories of old villagers. I have gained a deeper insight into Hakka culture and through that, a better understanding of my mother. The Programme also allowed me to take part in many villagers' activities. Once when my mother and I joined the Hing Chun Yeuk spring banquet, we were treated with the Hakka Feast of Nine Dishes and my mother happily said that she remembered eating those special dishes when she attended weddings in Sha Tau Kok in her childhood! To this day, she keeps reminiscing about that spring banquet.

Among all kinds of training offered in the Programme, my favourite one is the log carpentry class. I thought carpentry was extremely difficult and was only suitable for muscular guys. However, our teacher, woodcraft artisan Chi Lam put my worries to rest very quickly. He made quick work of utilising scrap timber from the village to make a wooden stool. With us novices in mind, he simplified the process and brought apprentices to help us. Finally, another student and I cooperated and managed to make a wooden stool on our own and it is now put in the village for students to use. I am very satisfied with my humble piece! Aside from that, I also like our oral history training class. Not only did we learn theories and skills, but we also had the opportunity to put them into practice. Three groupmates and I successfully interviewed a few villagers, and it was a very happy and unforgettable experience.

I gained far more than I expected from the Sustainable Lai Chi Wo Programme. Today, I long for the simple village life even more. I hope these villages can be conserved, so that my children and grandchildren can still experience rural life in the future!

1. The paddy I planted has finally yielded harvests!

. Under the guidance of woodcraft artisan Chi Lam, I made my own wooden stool, and I feel extremely satisfied!

Passing on Traditional Craftsmanship

Woody Leung



As everyone knows, life in a remote village is inconvenient. When the boiler or the plumbing fails, it may take forever for a technician to come for repairs. Woody originally planned to volunteer in farming rehabilitation, but after being found out to be a jack-of-alltrades, he has been frequently called into the village to help with plumbing and electrical maintenance. However, what he wanted to do the most was to repair the village's wooden artefacts.

My attraction to Lai Chi Wo's coastal ecology began as early as 2003, but all I knew about the village was that there were Earth God altars underneath two big trees. In 2016, a friend mentioned the Programme to me and reignited my childhood desire to plant sugar canes. Coming back after more than a decade, what struck me the most was that the Programme has brought back many aspects of life from the old days. Villagers collect firewood to cook in their houses and the 11 layers of bricks which make up the simple stoves can still be clearly seen. All these match with the mundane information and records from the past and made me become even more interested in examining other architectural features here.

At first, I happily fantasised about farming, but after planting rice seedlings for my first time and chatting with the elders around me, I slowly realised that farming was not about fun and games – one had to consider the time invested and economic sustainability. I was in low spirits, but then I was invited to contribute to an exhibition about rice farming and production in the past, held in a restored village house. Perhaps this was how a skilled worker could contribute the most to a village, just as in the past, businessmen and craftsmen came a long way to bring farm tools and other daily necessities to villagers.

Geographical isolation has helped maintain Lai Chi Wo's natural ecology and village landscape. The economic production model of the past and the current organic production are seemingly conflicting, but they are actually not mutually exclusive. The refurbishment of village houses can contribute to the inheritance of traditional craftsmanship. As newcomers, we should respect the villagers, and through discussions, reaffirm the value of the village's history and past lifestyles.

The Young Man Who Made Biochar

Anson Wong

Anson is a big supporter of local agriculture. After joining the university internship scheme of the Sustainable Lai Chi Wo Programme, he played an important role in preparing lands for farming rehabilitation in Lai Chi Wo. Even though it was harsh work under the scorching summer sun, he always wore a brilliant smile – truly a sunny boy. As he often helped with burning scrap wood to make biochar* to improve soil quality, our programme staff and Lai Chi Wo villagers like to call him "Firewood Anson".

I am very honoured to have taken part in the early stages of Lai Chi Wo's land rehabilitation work. Burning scrap wood, digging water channels and building fences at burning temperatures were by no means easy. However, when I thought of the bags after bags of biochar being produced, fields being opened up for passionate villagers and volunteers to farm on; the Policy for Sustainability Lab making use of these to do research, and as I witnessed Lai Chi Wo transforming from a deserted place into a vibrant village and the people here making friends with the village dogs, I felt that all my efforts were worth it!



Helping to prepare farmlands under the scorching sun was by no means easy, but the satisfaction brought by producing bags after bags of biochar was also difficult to be described.

^{*} Biochar is made by conducting pyrolysis of organic materials such as wood, grass and husk under low oxygen conditions. When mixed into soil, it can improve soil quality, facilitate crop growth and contribute to carbon fixation.

First Taste of Village Life

Rosa Chan



Experiencing rural life and culture for the first time in this small village feels incredibly unique!

Rosa is a young architect. In 2016, when she wanted to take a break from her work, she joined the Sustainable Lai Chi Wo Programme on the recommendation of a friend. She had always lived in urban areas so coming to Lai Chi Wo was the first time she experienced rural life and attempted to grow rice and other crops. To her, everything was novel and fascinating.

I had never worked in the fields before, so taking part in farming was very special to me; however for the same reason, it was difficult for my body to adjust, especially because it was a hot summer when I joined! Although it was very challenging and my colleagues often asked jokingly if I was about to faint, I truly enjoyed farming in this tranquil and beautiful natural environment. I found all the different kinds of work here extremely intriguing. Working, resting and chatting with villagers and colleagues, listening to villagers telling stories from the past, discussing happenings in the village with colleagues – these are all interesting and memorable moments to treasure.

To city folk like me, experiencing rural life and culture for the first time in this small village feels incredibly unique! I can now better understand my parents' village life in their youth, as well as the reasons for some of their habits. These are unexpected bonuses for me.

I hope Lai Chi Wo will thrive again one day; each house will have someone living in it, different types of crops will be grown in the fields, and the village will develop with diversity and sustainability. The Sustainable Lai Chi Wo Programme is a creative and avant-garde project. Hong Kong needs such programmes as a model for sustainable development of other villages.

The Lai Chi Wo Doggies

May Chan

May was a colleague from The University of Hong Kong, who was stationed in Lai Chi Wo. In August 2014, she officially joined the Lai Chi Wo farming rehabilitation and village revitalization programme. Half a year later, she even rented a villager's ancestral house and settled in Lai Chi Wo. However, what affected her the most was probably not farming rehabilitation but the village animals.

In April 2014, I went to Lai Chi Wo by boat for the first time to visit this village where I was going to work. As the boat approached the pier, what I first saw was that more than 20 dogs were waiting at the pier. And then, some female staff from the Food and Environmental Hygiene Department gave them a big pile of leftovers such as roasted chicken and duck. Those dogs all wrestled over the food. What an astonishing scene!

I found that these were not stray dogs but the village dogs of Lai Chi Wo, and they were the "indigenous villagers" here. After the villagers moved away, they remained here to guard the village and continued to multiply. When there was food, they gave birth to more puppies; when there was a lack of food, they naturally shrank in number. At first I simply wanted to feed these poor dogs with enough food, yet when I came into contact with them more often, I named each of them: Grandma Bei Bei, Ah Dai, Ah Sai, So Pak... Having names means that they have become my family members – what a big trouble I have created for myself!

After supplying them with enough food, I wanted them to live more healthily. However, it would be very expensive to take good care of so many dogs here. How could I do it all on my own? Colleagues, friends and volunteers thus gathered to serve these "emperor dogs" during spare time at our own expense. "Paws in Wo" was then established, and we have served over 60 dogs in these two years, feeding them, taking care of their basic medical needs and sterilisation, finding homes for them, and healing those seriously ill or injured... I have even become a dog owner myself. Chan Chow Pei and Chan Lat Chiu have become "bosses" at home, and So Pak has moved in as well. Taking care of the three dogs keeps me indeed extremely busy.

I can only say that when fate brought us together, I just could not resist. I have been experiencing the joys and challenges of being their caretaker and I know that it is a "path of no return".



"Fu Yong" Fields

Teresa Leung



In 2016, the "Fu Yong" fields were transformed into a lotus pond.

Teresa is the manager of The Hong Kong Countryside Foundation, and has acted as an important avenue for villagers to understand the Programme. Among all colleagues, she is the one most determined to learn Hakka. Using simple Hakka to communicate with indigenous villagers was particularly endearing to them, and helped the team understand their local culture.

When I entered the village in 2013, someone told me that there was a piece of "Fu Yong" fields (芙 蓉 田; literally meaning lotus fields in Cantonese) outside the West Gate of Lai Chi Wo. When the farming rehabilitation work began, I went to the village and tried to look for field boundaries in hopes of confirming the areas we have rented for the Programme. Although I expected the "Fu Yong" fields to be marshy (as the Chinese saying goes, lotus rises from the water), I could have never imagined mud going up to our knees and thighs. Every step was a challenge. If I were not with my colleagues from Produce Green Foundation, I probably would not have escaped from the swamp. It is human nature that when you are on your own, there are many things that you will not have confidence to try alone. The setting up of the volunteer group "Paws in Wo" with the aim to improve the livelihood of the village dogs is another heartfelt example of collaboration resulting in wonderful achievement.

In fact, we city folk who do not understand Hakka have beautifully mistaken "Fu Yong" (湖洋; meaning "marsh" in Hakka) for lotus because of their similar pronunciation. I have also misheard "Bi Teu Tam" (陂頭潭 – the name of a weir in Hakka) in the village as "Bui Teu Tam" (杯頭潭; meaning a cup-shaped pond because two tributaries of the stream converge here in a "Y" shape just like the shape of a wineglass). Once I realised my mistake, I quickly told others the correct word to avoid further misunderstanding.

In the village revitalization programme, we have all been "crossing the river by feeling the stones". Just like when we walked into the "Fu Yong" fields, we could not find the field boundaries and had to find other methods. Roads are formed by the footsteps of pathfinders, and we may need to take different roads to the same destination.

Repurposing Scrap Timber

An Interview with Woodcraft Artisan Chi Lam

Chi Lam (also known as Brother Chi) is a local woodcraft artisan and a friend of the new villager Monti. After moving into the village, Monti asked Brother Chi if the scrap timber left over from the revitalization work in Lai Chi Wo could be reused. The very first time Brother Chi went along with Monti to the village, he deftly built a chair on the spot with the scraps.

Brother Chi has a book which details ways to create furniture from wood still in its log form. "When you are handed such materials, it is your duty to use your creativity to transform them into finished products."

Brother Chi enjoys hiking and camping and there are trees all over the trails he takes. However, those trees are protected as they are often within country parks. Villages thereby offer artisans the conditions and resources which serve as an outlet for creativity. "Villages provide a lot of resources and materials for carpentry as wood can be found from the nearby hills. However, there are limitations. Since I am used to working with wooden slabs, I do not have much experience with logs. Other limitations I face are the availability of tools and equipment, as well as the shape and size of materials. But in hindsight, being forced to work within these constraints actually allows our creative juices to flow!"



Putting it together piece by piece, Brother Chi turned scrap wood into a chair within an hour and a half!

"In the past, carpentry was a necessary and common skill. Wood, mud and bamboo were the most frequently used raw materials in villages. Villagers knew how to use the surrounding materials to create simple tools such as rakes for various purposes. More complicated items such as large furniture and machines (like winnowers) would be specially made by professionals, but villagers would also do small repairs on their own."

Regrettably, carpentry is on the verge of fading into obscurity and is now considered a forgotten craft. "Times have changed and production has been industrialised. Traditional crafts are less competitive and will inevitably become obsolete." Nonetheless, more young people are becoming interested in carpentry in recent years and Brother Chi has taken on a number of apprentices. "Most of them look at carpentry as a leisure pursuit and do not regard it as a profession because it is hard for them to earn a living without enough demand for handmade furniture. Little opportunities to practise and hone their carpentry skills, coupled with inability to sustain a livelihood are some of the reasons why people give up easily on carpentry." These challenges are very similar to those faced by young people who return to farms. Many youngsters and even middle-aged people have traded in office work for farming. "Both farming and carpentry are a form of craft. After seeing how farming has become a stable job for some, I am hoping the same will happen for carpentry."

There is still a definite demand for woodcraft in Hong Kong, yet there are insufficient capacity, resources and facilities for it to develop further. Chi Kee Sawmill (志記鎅木廠) in Kwu Tung, the one remaining timber factory in Hong Kong, will probably shut down to give way to new town development, then are traditional crafts doomed to follow the path of agriculture and fall prey to urbanisation?

Lai Chi Wo – Adding Colours to my Creative Life

Christina Chan



I have been "interacting" with Lai Chi Wo. I have been photographing her while she has been inspiring me and making me grow. Christina is the photographer of the Sustainable Lai Chi Wo Programme. She is experienced in nature and environmental education, and also a writer about nature and wildlife.

As the Programme's photographer, at first, I conducted interviews and recorded the story of Lai Chi Wo's revitalization with the mindset of a photojournalist. As the Programme progressed, all the little things about Lai Chi Wo started inspiring me and adding life to my creative works. I have been "interacting" with Lai Chi Wo. I have been photographing her and at the same time she has been inspiring me and making me grow.

When I went to Lai Chi Wo for the first time, the abandoned fields were still untouched and the rice seedlings had not been transplanted. At that time, I had just walked out from a frame and was still searching for my future direction.

The first crop of paddy was successfully planted, yet we found birds feasting on our harvest. The second crop of paddy was later planted and volunteers covered the paddy with a net to prevent the birds from taking the harvest again.

Function-wise, it was a "bird net" but to me, it symbolises the frame that had been trapping me, binding me tightly with no room for any breakthrough. The bird net did not only let me take interesting photos, but it also provided me with a new way of thinking.

Looking at the world from inside the net was very different. When I took photos of the farmer working inside it, the photo came out blurry and a bit surreal. Many friends complimented this photo. Indeed, standing inside the net felt intriguing and every time I was in Lai Chi Wo, that feeling drew me to spend more time in the net and look at the outside world through it.

One day, when I was standing inside the net and carefully observing the organisms on it, I saw a mantis sometimes moving outside the net and sometimes inside it. The mantis was not blocked or trapped by the net and could go in and out of it effortlessly. The relationship between the mantis and the bird net inspired me. I then created a visual artwork titled "Breakthrough the Frame · Enjoy the Freedom".

I love to engage in artistic creation. The story of Lai Chi Wo's revitalization has given me a lot of space for creation. I have also drawn inspiration from interviews, and even learnt to break the frame and find my own path.

I am thankful to Lai Chi Wo for adding colours to my creative life.



Land Art in Lai Chi Wo

An Interview with Vincci Mak, Division of Landscape Architecture, Faculty of Architecture, The University of Hong Kong



Respect and communication are crucial. Both artists and villagers are still trying to understand and learn more about each other. Vincci Mak is a Senior Lecturer at the Division of Landscape Architecture of the Faculty of Architecture at The University of Hong Kong. She launched the course "Shaping the Landscape" at the University to examine the relationship between human and nature. Vincci led students and the general public in land art workshops in Lai Chi Wo in 2014 and 2016, in hopes that participants could rediscover the human-nature relationship through artistic creations.

"Land art originated from Western art development in the 60s and 70s. At that time, artists started questioning conventional norms: 'Why should artwork only be displayed in galleries or museums, or be traded for profit?' They wanted to challenge the prevailing practice of displaying artwork. Amid the anti-war, anti-nuclear and environmental movements of the period, artists began to explore environmental issues through artistic creations. They made use of local materials and environmental elements to create works which in turn shed some light on our relationship with nature."

The environmental movement in Hong Kong actually began as early as in the 60s and 70s, but for land art, it has only gained popularity in recent years. Of course, this has to do with the rise of the public's environmental awareness, but land-related current affairs are what really ignited the local people's interest in land art. "We can see that places where land art works are created often have land issues. Although land is a natural resource, it represents monetary value in the eyes of many because of the lack of space in Hong Kong which has given rise to questions such as: 'Where can we source land for housing?' and 'Who has the final say?' Recently, we are seeing an increase in land disputes pertaining to economic, livelihood, environmental and political matters as people began discussing and reflecting on Hong Kong's land problem."

"People also start wondering about how the word 'local' should be defined. They want to know how Hong Kong has prospered, why the New Territories is the way it is, how rural areas can



The course "Shaping the Landscape" brings the beauty of Lai Chi Wo to Hong Kong Island and a land art exhibition "Langue des Terres" was organised in Sheung Wan.

contribute to the development of Hong Kong, etc. Many people, myself included, have asked these questions. I suppose it is for us to trace our roots. We have also been seeing an increase in participation of sociallyconscious youth in the local art scene. Everyone is in general born with an inherent appreciation of plants and flowers, but once people hear that their homes would be taken away, they are filled with the need to take action."

Having promoted land art projects in Hong Kong for some years, Vincci believes that changing society through land art is a long-term endeavour. "Using art as a medium, we can attract participants to stay in rural areas and connect with the earth, water and living beings. Offering this kind of hands-on experience is more important than creating anything tangible. I think there are still many opportunities for developing land art in Hong Kong. When we start seeing participants who are visiting villages frequently and interacting with nature, this would mean that they have truly embraced the environment. But we are still a long way off from achieving this in a highly urbanised city like Hong Kong."

Due to historical and environmental factors, the lifestyle and mindset between urban dwellers and villagers are bound to be different. Like last year (2016), villagers requested to remove an artwork because of its impact on the village's "Fung Shui". Artistic creations need to be innovative, but how do we convince locals to allow artwork to be carried out on their land? "We exchanged ideas with artists from Japan's Echigo-Tsumari Art Triennale*. They mentioned that the first few years of promoting land art in villages were extremely difficult. Villagers showed a total disregard at first, but after long discussions they gradually became more open in sharing their land with artists. Now, everyone has accepted that the Art Triennale is a part of the village." "Respect and communication are crucial. Both artists and villagers are still trying to understand and learn more about each other. Everything needs to begin somewhere so we showed respect for the villagers' wishes by removing the artwork. We now have a better understanding of the village traditions and in turn the villagers see that we are willing to listen to their views. Next time, they will have more faith in us and our opportunity to create more artwork will come around again."

^{*} Echigo-Tsumari Art Triennale is the largest international outdoor art festival in the world. It has been held every three years since 2000 in the Echigo-Tsumari region of the Niigata prefecture in Japan. Its aim is to use farmland as a stage and art as a bridge to connect human and nature, attempting to shed light on the inheritance and development of geographically-based culture, as well as to revitalize the agricultural regions that have been declining in the pursuit of modernisation.

Building Village Infrastructure

An Interview with the Industrial Centre Team, The Hong Kong Polytechnic University: Engineer Wai-Che Lee, Executive Officer Sally Chan, Assistant Technical Officer Calvin Poon, and students Tsz-Yu Wan and Ho-Yin Shing



There is a lack of attention to village infrastructure in rural Hong Kong. The Sustainable Lai Chi Wo Programme attempts to bring in cross-disciplinary collaboration to improve the development of remote villages. How can the engineering profession contribute to this cause? On the recommendation of Dr Wing-Tat Hung of the Department of Civil and Environmental Engineering at The Hong Kong Polytechnic University, the Industrial Centre of The Hong Kong Polytechnic University introduced a summer programme at Lai Chi Wo in August 2016. Around 80 engineering students joined hands in constructing two outdoor agricultural depots and a small-scaled hydro-generator system in the village. Dr Hung retired and was succeeded by Dr Barbara Siu. She led a new group of students to Lai Chi Wo in August 2017 to pave bridges, repair roads and repair building roofs to continue improving the infrastructure for the village.

"The Industrial Centre's outreach summer engineering programme has been running for over 30 years. It provides support in improving and enhancing the recreational facilities mainly for needy communities and school units." Mr Lee from the Industrial Centre was the teacherin-charge of the summer engineering programme. He and other teachers and colleagues conducted several site investigations in Lai Chi Wo, to see how their engineering expertise could be applied to ameliorate Lai Chi Wo's facilities while meeting teaching objectives and allowing students to gain practical experience.

"In recent years, most rural engineering projects of the Industrial Centre were carried out in areas with easy access to transportation, taking account of the demand. As for Lai Chi Wo, poor accessibility has made the transportation of supplies extremely difficult compared to the urban areas. Even if it's only one screw missing, the entire project could grind to a halt. Therefore, every single component and tool must be planned in detail, or else we may not be able to deliver our services." Considering the remote location of Lai Chi Wo, the implementation of summer engineering programme was immensely challenging. The teaching team must do sufficient preparation and planning beforehand. But for the students, living and working in an uncharted rural area was definitely an unforgettable experience.

"Although students stayed in the village from Monday to Friday, they only had two to three days to complete their project. In this case, they were required to master time and engineering management skills to handle emergencies, especially when they had to work outdoors during the hot and stormy weather in August. Before going to Lai Chi Wo for the practicum, students had to receive basic engineering training at the Industrial Centre. They would then be responsible for performing engineering management on-site independently for the practicum, which simulated the operations of a construction company."

Student Wan was a trainee in 2016. He described his experience in Lai Chi Wo as playing the triple roles of a student, construction worker and engineer. An unexpected incident made him understand how engineers should handle different types of work with a professional attitude. "We received an abrupt request to build a workbench right after we completed

the scaffolding. As this task was unexpected, our entire student team and Mr Poon had to reconsider how to use the remaining materials to build it, and which kind of metal pipes we should use. Normally, we wouldn't pay attention to these details in class. It was therefore a good training opportunity for us to understand the characteristics and attributes of different materials."

"To begin with, we made reference to the existing workbenches in Lai Chi Wo and enhanced its original design. Unfortunately, we noticed an error in the new workbench design after completion. The minor flaw would not affect its function in an instant, but its long-term durability would be shortened. We were thus in a dilemma: should we rebuild it? Or should we simply present this product as it is? Mr Poon did not give advice upon the matter and told us to make our own decision. It was getting late and everyone was exhausted. Even our teachers from the Industrial Centre found it tiring to bend the metal pipes one by one and it could easily hurt their hands. Faced with a barrage of complaints, it was a hard decision to start over the project. Later, we all discussed whether it was good and proper to finish a project in this manner, and whether it was acceptable for us to put product quality aside. At last, we decided to take responsibility for the project and solve the error. In this case, a workbench may seem to be a trivial job, but for more rigorous construction projects we may encounter in the future, engineers must consider long-term safety and durability. The workbench finally took half of the original time to rebuild as we were already familiar with the procedures."



Students gained insight from Lai Chi Wo on how well-designed constructions can often contribute greatly to local development.

"Why do universities offer students opportunities for service learning? It is because we hope to give them hands-on experience. Besides enriching their knowledge and skills, the external practicum can also train their ability to deal with contingencies and enhance their interpersonal skills and sense of responsibility." Sally, from the Industrial Centre, believes that the practicum at Lai Chi Wo provides students with a special opportunity to receive whole-person education. "While working in Lai Chi Wo, students can immerse in the community to learn the traditional local culture and how to respect nature. They can also stay with the locals to experience authentic village life. From the practicum, students realised that other than large-scale infrastructure construction projects, they could also apply their engineering knowledge in many other areas. They have gained tremendous insight from Lai Chi Wo, for instance, well-designed constructions can often contribute greatly to local development, as evidenced by the small-scale power systems and drainage and sewage facilities built which proved to be very useful to the locals."

Compared to the familiar urban environment, rural villages may be more conducive in unleashing students' creativity. Student Shing, who often went hiking, saw some new possibilities in Lai Chi Wo. "I hiked to several deserted villages, but Lai Chi Wo was the place that revealed the true picture of rural villages and gave me inspiration to create new possibilities for this place. From an engineering perspective, can hydroponics be developed? Can old houses be repaired while having their original character preserved? I think the development of Lai Chi Wo may not require too many extra resources; instead we should focus on preserving the local culture, beautifying the village so as to attract tourists to have a short stay in the village for an authentic farming experience."

Rural renewable energy mix, agricultural management apps, the development of biochar, etc. There is a wide range of engineering research focusing on rural development all over the world, such as resistance to natural disasters, protection of soil and water resources, small-scale farming and responses to global warming. All these research areas are completely new to local students. Perhaps in the near future we will be able to witness these rural innovations in Hong Kong.

The Story Continues



The Story Continues

Professor Wai-Fung Lam, Director, Policy for Sustainability Lab

I believe the chapters above have explained the importance of research on rural sustainable development in densely populated international cities. In this concluding chapter, let me summarize the major lessons learned:

Conserving Biodiversity and Ecosystem Functions Villages are where humans and nature meet. They have unique ecological environments and can serve as buffers for ecologically sensitive areas from human disruption. The maintenance of vibrant village ecological environments calls for an appropriate degree

and can serve as buriers for ecologically sensitive areas from numan disruption. The maintenance of vibrant village ecological environments calls for an appropriate degree of management to keep their local ecosystem and biodiversity intact. The resumption of paddy farming in Lai Chi Wo has restored its wetland functions, thus increasing the species richness and abundance of amphibians and reptiles, and enriching local biodiversity. A variety of crops are now grown on the rehabilitated fields, creating diversified habitats for different species. The farming rehabilitation has adopted an ecology- and environment-friendly approach, practising organic farming and making use of renewable energy and appropriate technologies. These actions have greatly reduced the negative impacts of agriculture on the environment, and helped mitigate the adverse impacts of climate change in the long run.



Improving City Food Security and Reducing Food Miles

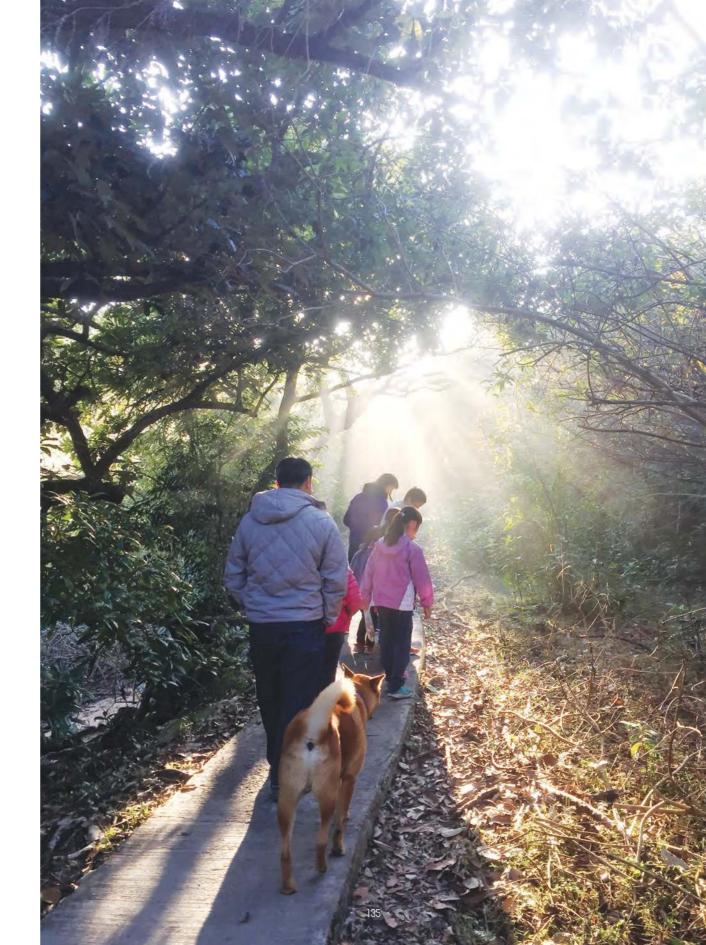
A sustainable city should have a healthy food self-sufficiency rate to safeguard food supply for the city and to stabilise food prices. In this era of climate change, energy shortage, environmental pollution and continuous shrinkage of global arable land, food self-sufficiency is of utmost importance. However, imported food accounts for 95% of Hong Kong's total food consumption. If the agricultural economy of rural villages in Hong Kong can be revived, it will help increase food security and improve food safety. Moreover, since the transportation distance of local produce is significantly shorter than that of the imported food, the carbon emission involved in locally produced food is much lower. The farming rehabilitation of the Sustainable Lai Chi Wo Programme has reconnected remote rural areas to the local food supply chain and created new village economic opportunities for local villages.

Passing on Local History and Traditional Culture

As local agriculture has been diminishing amidst rapid urbanization, agricultural village landscapes and traditional culture are gradually fading away. We have carried out revitalization activities in relation to traditional culture, such as oral history collection, traditional farming exhibition, village building rehabilitation, and traditional skills revitalization (such as the Hakka Cha Kwo, folk plant and mud brick making classes). All of these helped the public understand farming societies in the past and learn about the cultural diversity in Hong Kong in the process of revitalizing the traditional way of rural management. Practising the LOHAS Lifestyle Metropolitan life is fast-paced and urban environments are usually polluted and congested, lacking greenery and healthy living space. In recent years, more and more people are attracted to live in rural areas as they enjoy the scenic and tranquil rural environment and the simple agricultural village life. In developed countries such as those in Europe and North America, this kind of counter-urbanisation has started since the Second World War. The Sustainable Lai Chi Wo Programme has brought the village back to life. Some people from the city have settled in the village while quite a number of indigenous villagers are willing and looking forward to returning to the village after retirement. Village life has enabled people to learn about rural ecology and culture as well as the food production process. Villages bring people closer to nature and allow modern people to re-establish and experience a harmonious relationship with nature.

At present, revitalization of local villages is facing many challenges, including the loss of community networks, diminishing rural economy, inadequate technological development, a policy bias towards urban development, and a lack of social consensus on the strategy for sustainable development. The experience of the Sustainable Lai Chi Wo Programme has made it clear that "collaboration" is of major importance in resolving these problems. For other villages, the major lessons that they can learn from the Programme is the importance of partnerships, which include collaboration between property owners and people outside the community, support from different stakeholders, engagement with different professional sectors (such as agriculture, technology, architecture, planning and conservation) in rural development projects, and construction of collaboration mechanisms across organisations and within the community to seek common grounds amid differences so that groups with varying interests can build and work on a common vision. In 2016, the United Nations Development Programme urged people around the world to take local actions towards the 17 Sustainable Development Goals, which emphasise the need for multifaceted collaborations and pragmatic approaches to protecting the well-being of humans and the Earth.

The Sustainable Lai Chi Wo Programme adopted a holistic and diversified revitalization model which comprises variegated forms of conservation concepts such as cultural conservation, ecological conservation and landscape conservation, and also takes care of the development of rural community livelihood. The Programme entered a new phase in October 2017; a new division of labour among the three major steering organizations have emerged: The Hong Kong Countryside Foundation will collaborate with villagers to conserve and renovate a group of village houses in Lai Chi Wo to provide educational opportunities for Hakka life experiential learning; The Hong Kong Countryside Foundation and The Conservancy Association will work together to promote eco-farming management in Lai Chi Wo; the Policy for Sustainability Lab of the Faculty of Social Sciences at The University of Hong Kong has received support from The Hongkong and Shanghai Banking Corporation Limited to launch a next phase of the Programme - "HSBC Rural Sustainability @ Lai Chi Wo", which will focus on developing more partnerships among different communities of interests, and building an array of socio-economic models to put the concept of collaborative governance into practice; the Programme will establish the first Academy for Sustainable Communities in Hong Kong to incubate a multitude of social groups to help promote rural revitalization and achieve rural-urban symbiosis and sustainable development.





Acknowledgement

	ving (in alphabetical order) for their support which contributed to the ainable Lai Chi Wo Programme's first four years of work.	46 47 48 49	Information Services Department Howard C.C. Leung, The Hong Kong Federation of Countryside Activities
Supported by:		50 53 55(1) (5) (6)	Dr Billy Hau Wing-Fung Lo
The Hongkong and Shanghai Banking Corporation Limited		54(2) 55(2) 57 58 60 61	Produce Green Foundation The Conservancy Association Monti Lai
Special thanks to:		00 01	
Agriculture, Fisheries and Conservation Department		Chapter 3 66 67 75 77 79 82	Produce Green Foundation
Closed Area Permit Office, Hong Kong Police Force		74	Raymond Tsui
Environmental Protection Department		83	Dr Qian Xu
Guangzhou Academy of Agricultural Sciences		86 87 88 89	Keith Mak and Eugenia Pang Fiona Kae
Heung Yee Kuk New Territories		00 07	FIOLICIA
North District Office		Chapter 4	
Sha Tau Kok District Rural Committee		94 95 104(1)	Produce Green Foundation
		98 122	The Hong Kong Countryside Foundation
		106	Adley Tsang and Maria Wan
Photo source and credit:		108	Daisy M Li
		109	Teresa Tsui
Front cover and back cover	Produce Green Foundation	111	Raymond Wong
		112 113	Annie Ng
2 3 4 5 136 137	Kin-Ming Lau	114	Ivy Wong
		115(1)	Moon Fan
Chapter 1		115(2)	Helen Leung
24 26 28	The Hong Kong Countryside Foundation	116	Regan Li
Chanter 2		117	Patty
Chapter 2	Londo Doportmont	118	Woody Leung
44	Lands Department	119	Anson Wong Rosa Chan
45	Yam-On Tsang	120	NUSA CIIdII

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Lastly, we would like to thank all the persons, volunteers and organisations that have participated in or paid attention to the Sustainable Lai Chi Wo Programme.

Vivifying Lai Chi Wo: Sustainable Lai Chi Wo Programme Four Year Review and Outlook

Compiled by:	Policy for Sustainability Lab, Faculty of Social Sciences, The University of Hong Kong	
Editors:	Winnie Law, Katie Chick, Sianna Yiu, Debra Ling, Angel Ngan	
Publisher:	Policy for Sustainability Lab, Faculty of Social Sciences, The University of Hong Kong	
Address:	Room 703, 7/F, The Jockey Club Tower, Centennial Campus, The University of Hong Kong, Pokfulam Road, Hong Kong	
Phone:	3917-4767	
Email:	fosspsl@hku.hk	
Fax:	2857-2521	
Website:	http://www.socsc.hku.hk/psl/	
Designer:	LOL Design Ltd.	
Printer:	Elite Printing Ltd.	
Publication Date:	July 2018	
ISBN:	ISBN 978-988-78521-3-1	
The publication of this book is supported by The Hongkong and Shanghai Banking Corporation Limited.		
Not for sale		
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