



Planning for Recreational and Community Farming in Hong Kong

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Preface

The overarching planning goal of the Hong Kong 2030+ is to champion sustainable development with a view to meeting our present and future social, environmental and economic needs and aspirations. In this respect, three building blocks, namely planning for a liveable high-density city (Building Block 1), embracing new economic challenges and opportunities (Building Block 2), and creating capacity for sustainable growth (Building Block 3), have been established as the framework for formulating our territorial development strategy under the Hong Kong 2030+. Recreational and community farming could in particular play a role in Building Block 1 by contributing to the community green network for enhancing liveability and in Building Block 3 by forming a part in the green infrastructure to create capacity for sustainable growth.

Recreational and community farming (with its diverse functions as leisure and recreational pursuit, therapeutic activity, environmental education, community engagement, urban greening, part of urban ecology, etc) is worthy of a close look with a view to better understanding the benefits that it may bring to city dwellers and how it may contribute to improving the livability of our city and enhancing our environment for sustainable growth.

This topical paper constitutes part of the research series under “Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030” (Hong Kong 2030+). The findings and proposals of the paper form the basis of the draft updated territorial development strategy which is set out in the Public Engagement Booklet of Hong Kong 2030+.

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Part A: Recreational and Community Farming in Hong Kong

Definition

- 1.1 Recreational and community farming involves growing of plants in and around cities. In the context of Hong Kong, recreational and community farming is mainly pursued for the purposes of community gardening, greening, recreational/leisure, ecological values, education and alternative lifestyle, and not for commercial agricultural production or livelihood subsistence. It is mainly practised in parks, community gardens, rooftops, balconies, schools, vacant government sites, public rental housing (PRH) estates and peri-urban areas.

Functions and Benefits

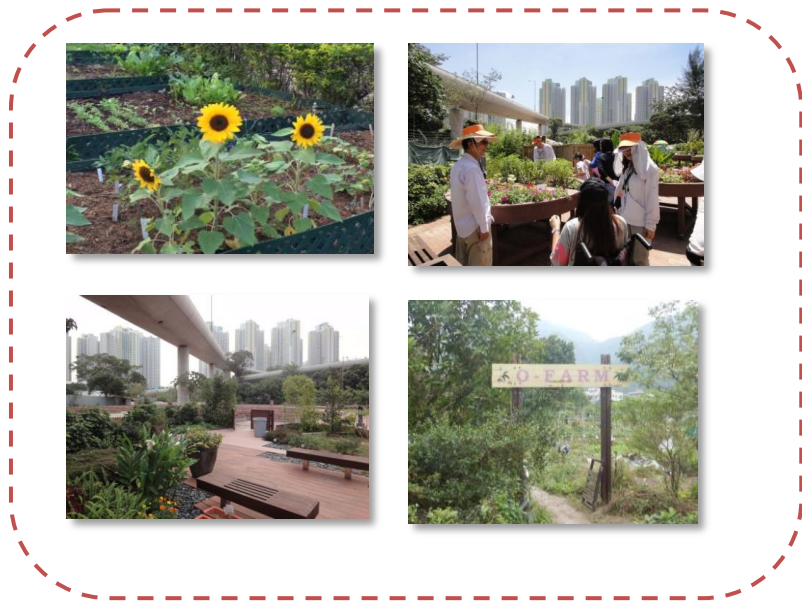
- 1.2 Recreational and community farming is integrated into the urban economic, ecological and green infrastructure system. Such linkages include the engagement of urban residents, use of typical urban resources (e.g. organic waste as compost and

urban wastewater for irrigation), impacts on urban ecology, competing for land with other urban functions, being influenced by urban policies and plans, etc. Recreational and community farming can contribute to urban greening and can be integrated into the green infrastructure of our city to create capacity for sustainable growth.

- 1.3 The trend of recreational and community farming is gaining momentum in both the local and overseas contexts. Recreational and community farming has many intangible social, environmental and health merits. In the context of Hong Kong, the focus of recreational and community farming is more on making use of urban spaces such as roof-tops, balconies, parks, community gardens, open spaces, vacant sites, community buildings, urban fringes or sub-urban areas etc. for recreational / educational plant growing and beautifying urban landscape through the greening effect. Recreational and community farming could offer an alternative lifestyle for city dwellers by providing leisure and recreational destinations and serve as a means for community engagement, human therapy, education and training. It could also be a positive part in the urban ecological system / urban green infrastructure,

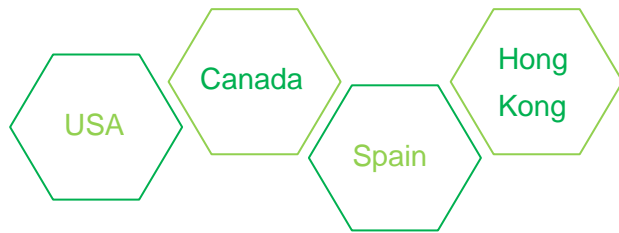
thereby help enhance environmental capacity of our city. Promotion of recreational and community farming will also help raise the awareness of the city dwellers on the protection of environment, allow them to get in touch with nature and make them more appreciative of the value and benefits of local agriculture.

Figure 1: Recreational and Community Farming in Hong Kong



Part B: Examples of Recreational and Community Farming

2.1 Some examples of recreational and community farming found in overseas and Hong Kong are highlighted below:



OVERSEAS

P-Patch Community Gardening Program, Seattle, USA

2.2 The P-Patch Community Gardening Program is made up of community managed open spaces in Seattle neighbourhoods. Gardeners, individually and collectively, use small plots of land to grow organic food, flowers, fruits, and herbs. The gardens are open to the public to enjoy. Amenities such as picnic areas, benches, art, flower

gardens, educational signage, sustainability demonstrations, and children's' gardens are found within these gardens.⁽¹⁾

2.3 The P-Patch Community Gardening Program is managed by Seattle Department of Neighbourhoods. As of December 2015, there are 88 P-Patch community gardens, 3,098 plots, and 6,800 gardeners. The gardens, with size from small to large, are built on land both publicly and privately owned.⁽¹⁾

2.4 For the past 40 years, P-Patch community gardeners have been nurturing civic engagement; fostering an environmental ethic and connecting nature to peoples' lives; transforming the appearance and revitalising the spirit of their neighbourhoods; and developing self-reliance and improving nutrition through education and hands-on experience.⁽²⁾

Toronto Urban Farm, Toronto, Canada

- 2.5 The Toronto Urban Farm is a partnership between the City of Toronto and the Toronto and Region Conservation Authority (TRCA). The farm sits on approximately 3.2 hectares of TRCA-owned land at Black Creek Pioneer Village. Located in one of Toronto's most vulnerable and stigmatized communities, this innovative community development initiative engages the youth and the wider community in organic farming, leadership development, environmental stewardship and health promotion. Services are provided through collaboration with the surrounding neighbourhood and organisations from various sectors, such as social agencies, schools, faith groups, and businesses.⁽³⁾
- 2.6 The TRCA has turned over the 3.2-hectare parcel to the City of Toronto's Community Gardens Program (CGP). Then, a master plan for the site was prepared for what was to become the Toronto Urban Farm. The Toronto Urban Farm operates as an extension of the CGP's Rockcliffe Demonstration and Teaching Garden, which offers multiple services to support community gardening city-wide. It aims to provide youth employment and leadership training skills; to increase participants' knowledge and skills of organic

farming, to enhance participants' awareness of environmental issues; and to promote healthy nutrition and active lifestyles.⁽³⁾

- 2.7 For the City of Toronto's CGP, it plays a pivotal and supportive role in the development of Community Gardens across Toronto. The CGP aims to identify and develop potential community garden sites throughout the City of Toronto; to develop partnerships between the government and community residents, seniors, faith groups, cooperative housing, hospitals, schools, daycare centres, and other community groups, for the establishment of community gardens; to nurture a diverse group of users and to develop a self-sustaining community gardens volunteer base; and to promote quality care of community gardens. As shown on the current website in 2016, about 60 community gardens are currently on the CGP list.⁽⁴⁾

Huertocity, Barcelona, Spain⁽⁵⁾

- 2.8 Huertocity is an on-going private initiative in Spain with a mission to "drape a living green carpet" over Barcelona, made of vegetables, flowers, grasses and shrubs, so that from the sky, the roofs are not concrete but a huge park, divided into blocks, which have their own personalities. Its

concept of “Huertos en el Cielo” (Heavenly Gardens) helps bring Barcelona closer to consuming home grown, healthy and organic vegetables produced on its roofs. The numerous benefits brought to the society include lower energy costs during winter and summer; social benefits in sharing and / or collaborating in a green space with the neighbours; and environmental benefits such as improved air quality.

2.9 Huertocity is dedicated to the design and installation of urban gardens and offer maintenance service in Barcelona and the surrounding area. Huertocity will design a complete plan to help clients cultivate in the space available, such as private house, apartment, community garden, terrace, old peoples’ home etc.

City Hall’s Rooftop Garden, Chicago

2.10 Chicago is the third most populous city in the U.S. and is home to over 3 million residents. More than 600,000 of Chicago’s residents live in areas with little access to fresh fruits, vegetables, and meat. The city also suffers from an “urban heat island” effect, causing it hotter than surrounding rural areas. To combat these problems, green roofs and community gardens are widely promoted in the city.⁽⁶⁾

2.11 Since 2000, a rooftop garden has been built on the City Hall of Chicago which is an 11-storey office building. The City Hall rooftop garden was conceived as a demonstration project under the City’s Urban Heat Island Initiative to test the benefits of green roofs and how they affect temperature and air quality. The garden with an area of about 1,886m² consists of 20,000 plants of more than 150 species, including shrubs, vines and trees. The plants were selected for their ability to thrive in the conditions on the roof, which is exposed to the sun and can be windy and arid. The rooftop garden improves air quality, conserves energy, reduces stormwater runoff and helps lessen the urban heat island effect.^{(7) (8)}

2.12 Chicago residents have constructed 600 green roofs and hundreds of community gardens.⁽⁶⁾ Recognising that green roofs are excellent sites for urban garden development, Chicago has published a “Guide to Rooftop Gardening” to encourage continued development of rooftop gardens. The Guide provides details on the design and technical considerations of constructing a rooftop garden and the relevant permits (such as building permit) required from the government.⁽⁹⁾

2.13 In September 2011, Chicago City Council approved amendments to the Chicago Zoning Ordinance to allow uses like community gardens in many parts of the city. The amendments clearly define community garden use, identify where such use is permitted and establish regulations designed to minimize potential impacts on surrounding property and help maintain the character of Chicago's neighborhoods. Under the Chicago Zoning Ordinance, community garden is neighbourhood-based development mainly for beautification, education, recreation, community distribution or personal use. Community gardens are allowed in every part of the city except manufacturing districts.⁽¹⁰⁾

HONG KONG

Community Garden

Green Hong Kong Campaign

2.14 The Leisure and Cultural Services Department (LCSD) has launched the Green Hong Kong Campaign to promote greening in the community and to enhance green awareness among the public through a series of greening education and community involvement programmes.⁽¹¹⁾

For instance, the Greening Schools Subsidy Scheme aims to encourage campus greening, promote a green culture among students and cultivate their interest in growing plants (**Figure 2**). The scheme provides subsidies to participating schools to implement tree planting project, garden plots project, horticultural maintenance and greening activities. LCSD also assigns horticulture instructors to advise, assist and monitor the implementation progress.

Figure 2: Greening Schools Subsidy Scheme



Photo credit: Leisure and Cultural Services Department

2.15 As part of the initiatives to promote greening, the Community Garden Programme has been launched and in operation since 2004. Gardening courses are provided to equip participants with the basic skills of growing ornamental plants, fruits and vegetables in selected parks or open space so that they can have a taste of gardening

and then continue to pursue the interest if they so wish (**Figure 3**).⁽¹²⁾ As at September 2016, 23 community gardens have been set up in 18 districts such as Sun Yat Sen Memorial Park Community Garden in Central & Western District, Lai Chi Kok Park Community Garden in Sham Shui Po, Che Kung Miu Road Playground Community Garden in Sha Tin etc.⁽¹³⁾

Figure 3: Community Garden Programme



Photo credit: Leisure and Cultural Services Department

Public Rental Housing Estates

2.16 The Community Garden Project by the Hong Kong Housing Authority (HKHA) aims to raise environmental awareness, while fostering a sense of belonging and neighbourhood.⁽¹⁴⁾ Tenants of Public Rental Housing (PRH) can grow their own crops in the community gardens of the PRH Estates (**Figure 4**). The Project provides a good education opportunity as well as fun for all those who spend time there. Under the project, planting beds / planter boxes are set up in suitable locations of PRH estates for tenants to participate in the growing of vegetables or crops. HKHA will provide tenants with basic farming tools and technical support. The project was first rolled out in Sun Chui Estate at Shatin in 2008/09. Up to 2015/16, HKHA has implemented the project in 47 PRH estates. HKHA targets to provide communal planting area or community garden in every new housing project with a site area larger than 2 hectares. HKHA also cooperates with Non-Government Organisations (NGOs) to carry out community garden projects. NGOs will provide instructors and guidance to the participants.

Figure 4: Community Gardens in Public Rental Housing Estate



Photo credit: Hong Kong Housing Authority

Recreational and Community Farms with a Social Dimension

2.17 Many NGOs and the private sector set up leisure farms and/or community gardens as a means to achieve their social visions, such as social integration, healthy lifestyle and sustainable development.

Urban Oasis

2.18 The Urban Oasis Project (UOP) was initiated by the Christian Family Service Centre (CFSC).⁽¹⁵⁾ A piece of vacant government land in Kowloon Bay surrounded by various highways structures has been leased to CFSC

since 2010 under Short Term Tenancy arrangement until now. Through setting up of a recreational and community farm, UOP established a platform to provide social services for the local community as well as medical and rehabilitation services. As a large-scale recreational and community farm, it also aims to offer multiple benefits to the local community as well as effectively utilise vacant urban lots.

2.19 The farm mainly comprises a planting area and a horticultural therapy garden (i.e. Serene Oasis). A variety of flowers, herbs and crops are grown by organic farming methods. It is primarily staffed by volunteers. The farm plots are rented out on a seasonal or monthly basis by charging members a small fee to sustain the operation. **(Figure 5)**

Figure 5: Urban Oasis



2.20 In setting up the farm, CFSC has encountered difficulties in overcoming the technical issues. The site is virtually vacant with no existing electrical, mechanical, or utility installations, so everything has to be installed. The major issue is drainage connection, as the operation is not allowed to be connected to the permanent drainage system. Also, being located amidst the residential neighbourhoods, the drainage system must be well installed to avoid causing any nuisance to the nearby residents.

Rooftop Farming

2.21 In view of the limited space for recreational and community farming in the urban areas, rooftop farms have emerged on commercial / industrial buildings, albeit with limited development so far. Planter boxes are the common medium for growing on rooftops, as they do not require heavy investments or installation of fixed structures. Universities and companies also set up rooftop farms in their premises for their students and staff with a view to offering places for relaxation. None of these rooftop farms are meant for large-scale production for commercial sale.

2.22 However, in the use of rooftop for farming practices, a number of factors need to be considered. The rooftop

should have sufficient loading for the planter boxes which would be filled with soil, and space for associated facilities, e.g. temporary structures for office and resting places. The activities should not affect the impermeable layer of the roof. As the plants need to be watered every day, the drainage system of the roof should properly drain out the water. Whether the rooftop is part of the means of escape of the building should be clarified. Rescue actions should not be adversely affected by the farm. Whether the rooftop is originally designed for public access should also be checked. Some buildings, e.g. school, their roofs are not supposed for public access and hence the height of the parapet wall may not fulfil relevant building regulations for public access. Therefore, to allow more rooftop farms to be set up, space for rooftop farming would need to be taken into account in the design stage. In addition, site constraints of setting up recreational and community farms should be addressed and building professionals should be consulted at an early stage.

Hysan Urban Farm in Causeway Bay

2.23 The Hysan Place rooftop farm came into operation in December 2012 and has been open to the public since April 2013 until now. Located in Causeway Bay, this rooftop

farm is one of its kinds firstly appear within a modern, mixed-use, commercial establishment in a commercial hub of Hong Kong (**Figure 6**).

2.24 The aim of Hysan Urban Farm is to promote sustainability and encourage a healthy lifestyle. The company, Hysan Development Co. Ltd., having a long-standing relationship with the local community, envisions that the building should also serve the local community apart from profit-making

Figure 6: Hysan Urban Farm



Photo credit: Hysan Development Co. Ltd.

2.25 The farm is available for renting primarily for the staff and tenants of Hysan Place. In partnership with SEED (Sustainable Ecological Ethical Development Foundation)^λ, it runs farming workshops at the rooftop farm. It is open to the public on appointment and NGOs are invited to participate in the project.

2.26 Apart from other technical issues concerning the rooftop farm, the critical issue for the setting up of Hysan Urban Farm was the need to transfer the electrical and mechanical (E&M) utility installations from the roof to the 35/F and 36/F in order to make room for the rooftop farm. This has involved additional cost from the developer.

^λ SEED was formed in 1999. Their primary mission is to promote the organic movement in Hong Kong, concerning the areas of food safety, ecosystem & human welfare, and organic farming. At the same time, emphasis has been put on promoting sustainability and ethical consumption practices in society.
<http://seed.org.hk/>

Hobby Farms in Peri-Urban Areas or Urban Fringes

O-Farm

2.27 O-Farm was established in 1999. The farm is situated at Hok Tau with an area of about 1 hectare. O-Farm is an organic farm promoting the concept of permaculture* (**Figure 7**).⁽¹⁶⁾ The farm is open to the public every Saturday and Sunday. Farmland rental programme is available for the public to gain experience in organic farming. Farming tools, organic fertiliser, seedlings, irrigation services and technical support are provided to participants. In addition, community projects are organised by O-Farm to promote the concept of permaculture, such as organising organic farming programme in primary schools.

Figure 7: O-Farm



Produce Green Organic Farm

2.28 Produce Green Foundation, a non-profit charitable organization, was established in 1988 by a group of local enthusiasts in modern farming and environmental protection.⁽¹⁷⁾ It has set up the first organic farm, namely Produce Green Organic Farm, in Hok Tau in the New Territories (**Figure 8**). The Farm promotes green lifestyle to the public through organic farming. It organises courses for organic farming and publishes “Hong Kong Organic Directory”. It also promotes community gardening through the establishment of the Hong Kong Organic School and Community Network and organising Campus

* The term permaculture (as a systematic method) was first introduced by Bill Mollison and David Holmgren in 1978. The word permaculture originally referred to "permanent agriculture". *“Permaculture is a philosophy of working with, rather than against nature; of protracted and thoughtful observation rather than protracted and thoughtless labour; and of looking at plants and animals in all their functions, rather than treating any area as a single product system.”* (Mollison, B. (1991). *Introduction to permaculture. Tasmania, Australia: Tagari.*)

and Community Organic gardening seminar. It also organises environmental education and eco-tourism activities.

Figure 8: Produce Green Organic Farm



Photo credit: Produce Green Organic Farm

Part C: Strategic Directions and Related Issues

3.1 Various types of recreational and community farming are spawning within the urban areas. While LCSD's programme focuses on promotion of greening through measures such as community gardening and HKHA promotes community gardening for environmental awareness, recreational and greening purposes, some NGOs or the private sector use recreational and community farming as a tool for community engagement, human therapy, education and training. Recreational and community farming is practised in some sub-urban areas as hobby farms.

3.2 As mentioned in paragraph 1.3, recreational and community farming performs various functions and brings many benefits to our city as below:

- adding urban greening in the built-up area;
- being an important component in the green urban infrastructure, by using renewable energy, consuming food waste as compost and contributing to reusing / recycling resources;

- green rooftops and green spaces created by recreational and community farming or community gardens contributing in a positive way to the micro-climate in the city by reducing temperature and urban heat effect;
- providing recreational / educational activities for city dwellers;
- offering opportunity for a diversity of lifestyles and allowing people to get in touch with nature;
- the promotion of recreational and community farming building up a communal green network and enhancing liveability of our city; and
- improving and enhancing our environmental capacity through being a positive component in urban ecology.

The merits of promoting recreational and community farming provide insight in retrofitting the existing urban fabric as well as planning for new development areas in Hong Kong. Consideration should be given to integrate recreational and community farming into the built environment of our city.

3.3 At present, recreational and community farming in Hong Kong are mainly carried out in community gardens, balconies or rooftops of private buildings and schools. In view of the versatile space possible for accommodating recreational and community farming activities, a more receptive mindset could be adopted by the Government in enabling and regulating recreational and community farming related purposes in different parts of the urban areas and within buildings. Consideration could also be made to enabling the use of rooftops, podiums, vacant government sites or amenity strips by local charity organisations or NGOs for recreational and community farming or related purposes on a temporary basis. In planning public open space or landscaped area, more space could be made available for community gardening purposes. However, it should be noted that farming practices which seek to produce and supply food intended for human consumption have to comply with the relevant food safety standards and be subject to relevant regulatory regimes applicable.

3.4 In reviewing the strategic direction of our city in Hong Kong 2030+, recreational and community farming plays a positive part in Building Block 1 to enhance liveability of our high-density city by setting up community green networks

and also in Building Block 3 to create capacity for sustainable growth through contributing in urban greening and green infrastructure of the city. With the various benefits and contributions that recreational and community farming may bring to our society as discussed above, it will be worthwhile to explore how recreational and community farming could play a part in our city and how the Government may help facilitate this role. Opportunities for recreational and community farming should be identified in order to capture the benefits it brings and create a more liveable environment for city dwellers.

Promoting Recreational and Community Farming: Provision and Guidelines

3.5 In view of the anticipated growing trend and demand for recreational and community farming initiatives, and taking into account the overseas experiences, such as Chicago, the Government may take initiative to promote as well as to regulate recreational and community farming under respective concerned disciplines as appropriate and to introduce relevant guidelines if considered necessary. Potential issues from recreational and community farming

such as proper irrigation and drainage system, structural capacity and loading of rooftop, public access, compatibility with surrounding environment, parking /loading/unloading, implementation aspects, etc have to be carefully considered and addressed with a view to ensuring proper development of recreational and community farms.

Endnotes

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