

Planning for Agricultural Uses in Hong Kong



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+. A sustainable agricultural sector in Hong Kong, despite its limited contribution to the overall economy could still present new economic opportunities in support of Building Block 2 by contributing to the diversity of economic sectors.

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: Agriculture as a Primary Production

Contribution to the Hong Kong's Economy

1.1 Local agriculture has diminished in terms of production volume as Hong Kong has become a predominantly urbanised and service-oriented economy and reliant on imports for food supply. The agricultural sector accounted for less than 0.1% of the Hong Kong's gross domestic product (GDP) in 2014⁽¹⁾. Yet, it still contributes to the economy of Hong Kong by:

- producing fresh vegetables, fruits, as well as live poultry and pigs for local consumption;
- offering an alternative source of food supply;
- reducing carbon footprint through minimising food mile; and
- helping recycling food waste as compost for farming.

In addition, the trend for increasing adoption of organic farming practices in our local farms could be more friendly to our environment as no chemical pesticides and fertilisers are used. Active farming activities could also help preserve our

rural landscape, and contribute to regulating the micro-climate of the local environs with growing of produce.

By providing a local food source and a better environment for our population, developing local agriculture could help attain long-term sustainability of our society. To maintain the rural landscape which would contribute to enriching the visual and landscape value of Hong Kong, agriculture practice could be seen as a form of land management and maintenance in the rural areas.

Figure 1: Products of Hong Kong Organic Vegetables



Photo Credit: Vegetable Marketing Organization

Poultry and Livestock Keeping Industry⁽²⁾

- 1.2 The poultry and livestock keeping industry has been facing a lot of challenges in the past decade or so in view of the growing concerns about the potential risk of poultry and livestock farms to public health and the environment.
- 1.3 In 1987, in view of the indiscriminate discharge of livestock waste causing severe pollution in the watercourses in the New Territories, the Government introduced the Livestock Waste Control Scheme, which was subsequently amended in 1994. This Control Scheme bans livestock keeping in those areas designated as Prohibition Areas. Livestock keepers operating in other areas can continue to rear livestock provided that they handle the waste properly and treat it to the required effluent standards before discharge. Legislative controls on livestock waste are provided by the Waste Disposal Ordinance (Cap. 354) and the Public Health (Animals and Birds) Ordinance (Cap. 139). Poultry and livestock keepers have to comply with the relevant requirements regarding the poultry and livestock keeping industry under these Ordinances, such as obtaining a licence from the Agriculture, Fisheries and Conservation Department (AFCD) for the operation, observing the

requirements of the Code of Practice for livestock waste management under the Waste Disposal Ordinance for proper handling of livestock waste. Failure of compliance of these requirements may constitute an offence and the poultry and livestock keepers may be subject to enforcement action.

Figure 2: Fresh Food Wholesale Markets



Photo Credit: Agriculture, Fisheries and Conservation Department

- 1.4 In 2006, the Government launched a Voluntary Surrender Scheme to encourage pig farmers to surrender their Livestock Keeping Licences (LKL) and cease their farm operation permanently, in return for ex-gratia payment. Under this scheme, 222 pig farmers had surrendered their LKL.⁽³⁾ There are currently 43 local pig farms in operation.

- 1.5 To reduce human contact with live poultry for better prevention of human infection of avian influenza, the Government launched a Voluntary Surrender Scheme and a Buyout Scheme in 2004 and 2008 respectively for poultry farmers and other related businesses in the live poultry supply chain. Under these two schemes, 162 poultry farmers surrendered their LKL.⁽³⁾ The total rearing capacity has been capped at 1.3 million since 2008. There are currently 29 poultry farms.
- 1.6 For pig and poultry farmers who have opted to continue their operations, AFCD has drawn up separate codes of practice to help them meet the required biosecurity and hygienic standards. AFCD also provides farmers with technical and financial support. In view of the continued threat of avian influenza, the Food and Health Bureau (FHB) is conducting a consultancy study on the way forward of the live poultry trade in Hong Kong. The study is expected to be completed by end of 2016 and the Government will consult the public on the recommendations of the consultant thereafter.

Agricultural Land

- 1.7 The agricultural land in Hong Kong was massively converted to container yards and open storage in 1980s. In particular, the

Melhado case[#] in 1983 had led to an unintended consequence of proliferation of such uses and resulted in general degradation of the rural environment, causing nuisance to the local communities and creating such problems as flooding, environmental pollution, visual intrusion, traffic congestion and safety hazards to properties and life. Since the container yards and open storage uses could pay higher rent than agricultural use, many landowners changed their fields to such uses. The situation was arrested upon the enactment of the Town Planning (Amendment) Ordinance in 1991 which provides the Planning Authority with enforcement power against unauthorised developments in areas covered by the Development Permission Area (DPA) Plans or the replacement Outline Zoning Plans (OZPs). Within DPAs, all developments are unauthorised unless the development is either in existence before the gazettal of the DPA Plan, permitted under the relevant statutory plan or covered by valid planning permission.

[#]In the New Territories much of the land is held privately under 'Old Schedule' lots contained within the Block Government Leases (BGL, formerly known as Block Crown Leases) and described as 'agricultural land'. In the Court of Appeal judgment of Attorney General v. Melhado Investment Ltd. (1983/HKLR), lots granted under the BGLs are subject to no restriction on the use of the land, other than the clause preventing 'Noisome or Offensive Trades' being carried out. Accordingly, so long as 'development' does not include any buildings, the lot owner may use the land for purposes not restricted to agriculture, for example open storage of goods, under the existing terms of the lease.

1.8 The total amount of agricultural land⁺ has been decreasing from over 8,000 ha in 1980 to about 4,500 ha in end 2015. Active farmland has been decreasing from just under 4,000 ha in 1980 to less than about 700 ha in end 2015. Active farmland is mainly located in the rural areas in the New Territories, and the urban fringes. Agricultural activities in the areas of Sheung Shui, Lam Tsuen, Fanling, and Kam Tin are more concentrated. Some actively farmed fields are scattered in Ta Kwu Ling, fringes of Yuen Long, Tin Shui Wai and Tsuen Wan new towns as well as on Lantau Island, Peng Chau and Lamma Island.

Figure 3: Farming in Hong Kong



1.9 The bulk of the agricultural land is under fragmented private ownership and occupies the relatively flat areas in the New Territories. The vast majority takes the form of irregular plots of farmland of varying sizes, reflecting the state of farming activities in rural villages in the past. The average farm size in the territory is about 0.2 ha or 3 dau chung (斗種)*.

⁺ The amount of agricultural land is based on the rolling survey of AFCD.

*Dau chung is the customary local measurement unit for farms equivalent to about 674.5 square metres or 7 260 square feet.

Part B: Types of Commercial Farming in Hong Kong

Conventional Farming

2.1 There are various kinds of farming activities in Hong Kong. The conventional farming grows market garden crops such as vegetables and flowers, field crops and fruits. The farms are in commercial operation, usually selling their produce to Vegetable Marketing Organization (VMO) or Government wholesale vegetable markets. Farmers cultivating in a traditional manner usually farm on open and extensive pieces of rural land, assisted by basic machines. Some of them would erect greenhouses or sheds for production of higher value vegetables and flowers.

Figure 4: Conventional farming activities



2.2 AFCD and VMO have jointly run the Accredited Farm Scheme since 1994. The scheme aims at promoting the adoption of good horticultural practice and environmentally friendly production. Integrated pest management and proper use of pesticides are emphasized with a view to ensuring production of quality vegetables that are safe for consumption. The scheme thus safeguards the public health and benefits the farming community. The Scheme opens for participation by both local and Mainland farms which are registered farms for supplying vegetables to Hong Kong. There are currently 311 accredited farms, of which 275 are local farms (about 84 ha of cultivated area) and 36 farms are on the Mainland (about 2,905 ha of cultivated area).

Figure 5: Accredited Farm Scheme



Photo Credit: Agriculture, Fisheries and Conservation Department

2.3 Accredited farmers have to follow the guidelines of the Scheme and allow inspections of their farms by AFCD. The operations of accredited farms are closely monitored with samples of vegetables taken for analysis of pesticide residues. New cultivation techniques and other technical support are also provided to accredited farms. Vegetables from accredited farms must be marketed through VMO, which, in addition to AFCD, also samples vegetables for pesticide residue analysis before the vegetables are sold in accredited retailers assigned by VMO.

Organic Farming

2.4 Organic farming is an agricultural operation method. Operators of organic farms produce, handle and process in a way with strong emphasis on environmental concerns. Their focus is not just on the product itself, but the entire process from production to delivery to consumers. The whole procedure should not compromise the organic integrity of the environment.⁽⁴⁾

2.5 During the 1990s, amid growing public concerns over food safety and environmental protection, the Government began to promote organic farming. While organic farming can produce

food in an environmentally friendly and sustainable manner and better protect our farmlands and countryside, it can also open up a niche market that can bring in a premium for local farmers. Moreover, it can offer a wider and better choice of fresh vegetables to local residents.

2.6 Since late 2000, AFCD has been actively promoting organic farming. AFCD provides technical support to farmers who engage in organic farming as well as farmers who wish to switch from conventional to organic farming. There are currently 561 organic farms in Hong Kong. These organic farms include the traditional family-operated farms, enterprise-operated farms, educational/ leisure farms and self-claimed organic farms.⁽⁵⁾

Figure 6: Organic Farming in Hong Kong



Photo Credit: Agriculture, Fisheries and Conservation Department

2.7 The Hong Kong Organic Resource Center (HKORC) was established in 2002 and has run its independent organic certification service for organic farmers and organic food processors since 2004. HKORC has certified 148 crop production farms and seven processing firms.

Figure 7: Organic farm and products



Figure 8: Organic certificate by Hong Kong Organic Resource Center



Photo Credit: Hong Kong Organic Resource Center

Agriculture involving Advanced Technology

2.8 In view of the technology advancement and changes of public aspirations for food safety and quality of life, a number of new agricultural activities employing advanced technology are flourishing in Hong Kong. Examples of this type of new agricultural activities include hydroponics and aquaponics which can be accommodated in green houses/sheds or even in high-rise buildings.

(a) Hydroponics

Hydroponics is a technology for growing plants in nutrient solutions (water containing fertilizers). Hydroponic systems are further categorized as open (i.e. once the nutrient solution is delivered to the plant roots, it is not reused) or closed (i.e. surplus solution is recovered, replenished, and recycled).⁽⁶⁾

Figure 9: Hydroponics method of growing plants



VMO and AFCD have jointly established a “Controlled Environment Hydroponic Research and Development Centre” (C.E.H. R&D Centre) in the Cheung Sha Wan Wholesale Vegetable Market, the first of its kind in Hong Kong to demonstrate the efficacy of the technology. The Centre was officially inaugurated on 15 March 2013.⁽⁷⁾ The C.E.H technology has various advantages: enabling planting in a controlled environmental condition, efficient use of

space through vertical cultivation, flexible production locations, no pesticide and contamination, and the adoption of energy saving technology. The cultivation period for baby leaf is 21 days, and the quantity of crops produced can amount to 40 kg per day. The C.E.H. R&D Centre produces ready-to-eat “cup-vegetables” branded “i-Veggie” for sale at selected local stores.

Figure 10: i-Veggie



Photo Credit: Vegetable Marketing Organization

In the private sector, there are 19 hydroponic farms established on farmlands in the New Territories or in industrial buildings. Six of them are set up indoors with artificial lighting that is similar to the C.E.H. R&D Centre. The rest of them are mainly set up in greenhouses using natural lighting. It is estimated that about 2,000 kg of hydroponic vegetables are produced every day and the products are supplied to restaurants, retail shops, supermarkets and individual households.

Figure 11: A hydroponic farm in the New Territories

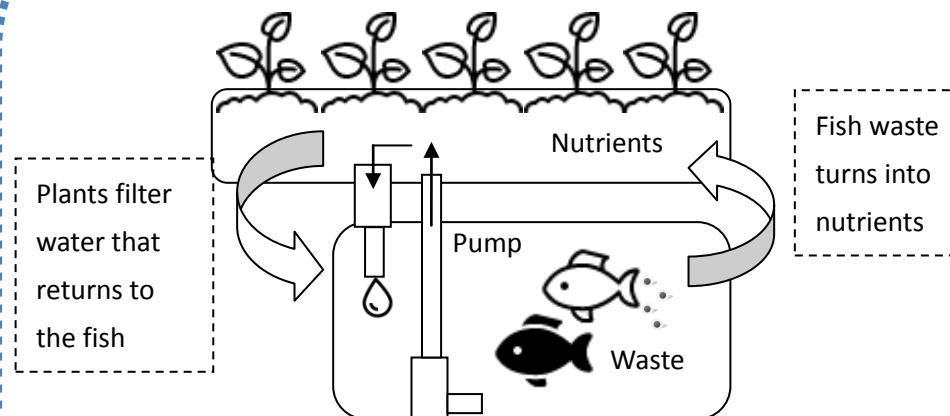


Photo Credit: Food and Health Bureau

(b) Aquaponics (魚菜共生)

Aquaponics is a food production system in a controlled environment that contains fish, vegetables and microorganisms. Microbial organisms in the system decompose fish waste to provide nutrients for vegetables which in turn filter water source for fish.⁽⁸⁾ No pesticide and contamination would be involved.

Figure 12: A diagram explaining the process of aquaponics



The first aquaponic farm in Hong Kong is situated inside an industrial building in Kwun Tong. Vegetables are grown in a closed environment by making use of specific spectrum of light to enhance the efficiency of plant photosynthesis. Water filtration and ultraviolet disinfection are applied to purify water and to reduce the presence of heavy metals.

Nowadays, aquaponic farms are not only engaged in production but also in selling produce direct to markets. In addition, some farms also provide technical services to help clients set up aquaponic farm on a trial basis and promote green living by giving seminars and setting up aquaponic system for schools, churches and social enterprises.

Findings of

“2014 Area Assessments of Industrial Land in the Territory”

- Hydroponics and aquaculture were found in industrial buildings.
- The Study recommended that opportunity would be further taken to examine the feasibility of allowing more flexibility to facilitate such uses in industrial buildings.

Figure 13: Aquaponics in Hong Kong



Farmers' Market

2.9 A number of farmers' markets have been set up by private initiatives in Hong Kong to facilitate local farmers to sell their produce to local consumers. These initiatives help promote sales of local farm produce on the one hand, and provide a platform for farmers to reach out to customers. Examples include Lam Tei and Tai Po farmers' markets organized by the Federation of Vegetable Marketing Co-operative Societies, the Organic Farmers' Market at Central and Organic Farmers' Market at Kadoorie Farm and Botanical Garden by Kadoorie Farm and Botanical Garden, and Organic Farmers' market at Mei Foo by Young Men's Christian Association.

Figure 14: Farmer's Market in Hong Kong



FarmFest⁽⁹⁾

2.10 FarmFest is an annual multiple-day farmers' market jointly organised by AFCD, VMO and the Fish Marketing Organisation at Fa Hui Park of Mongkok. Through this high profile event, it aims to boost our support for the local agricultural and fisheries industry by offering the largest farmers' market in Hong Kong for farmers to promote their fresh produce to customers.

Figure 15: FarmFest



Photo Credit: Agriculture, Fisheries and Conservation Department

Part C: New Agriculture Policy

- 3.1 In early 2015, FHB and AFCD conducted a public consultation inviting public views on adopting a more proactive approach towards the modernisation and sustainable development of local agriculture. Apart from listening to the views of stakeholders through open forums and consultation sessions targeted at functional sectors, more than 1,100 written submissions were received.
- 3.2 The public in general expressed wide support for the general direction of the proposed New Agriculture Policy (NAP) and various supportive measures underpinning the NAP. Many considered that the sustainable development of agriculture would help meet consumers' demand for quality food with high safety standard as well as preserve the rural environment, amongst other benefits. Some observed that the value of agricultural development lay not just in its contribution to the economy, but also in its attributes as a public good contributing to the well-being of society. Some stressed that agriculture and ecology were closely related, and therefore the focus of the policy should be on the sustainability of local agriculture, as well as protecting and conserving natural

resources. During the consultation, there had also been calls for measures to better protect and utilise existing agricultural land. Not only do they urged according higher priority to the protection and preservation of agricultural land, they also proposed that the Government should review agricultural land use, conduct a comprehensive survey to identify good quality agricultural land that was worth preserving for long-term agricultural use, and devise effective means to forestall farmland from being irreversibly damaged or channelled to any other incompatible uses and to facilitate or even mandate such farmland be put to active, productive and sustainable agricultural uses.

Figure 16: New Agriculture Policy

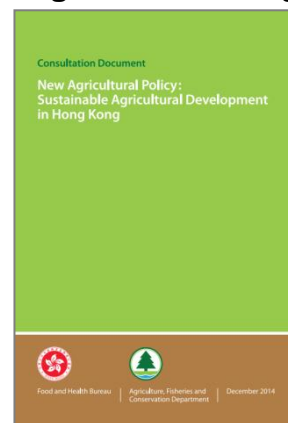


Photo Credit: Food and Health Bureau

3.3 Taking into account the public's views, the Government announced in the 2016 Policy Address the decision to implement the NAP. Major measures included establishing an Agricultural Park (Agri-Park), exploring the feasibility of designating "Agricultural Priority Areas" (APA), setting up a \$500 million Sustainable Agriculture Development Fund (SADF), providing better support and assistance to help farmers move up the value chain in areas such as product marketing and brand building, and developing leisure and educational activities related to agriculture. Some of the measures, such as the establishment of the Agri-Park and the consultancy study to explore the feasibility and merits of designating APA in Hong Kong, would have implications on land use planning for agricultural uses.

Figure 17: Farming in Hong Kong



Part D: Strategic Directions for Planning for Agricultural Uses in Hong Kong

New Agriculture Policy

4.1 The overall policy objectives of the NAP are to sustain local agriculture as a primary production sector, enhance the competitiveness of local farms, protect, revitalise/rehabilitate and optimise the use of quality agricultural land for agricultural purposes. The planning policy for agricultural uses will aim at facilitating the implementation of the NAP by appropriate land use measures in the same direction.

Protection and Rehabilitation of Agricultural Land

4.2 To pursue a sustainable commercial agricultural sector, protection of agricultural land, in particular, those of good quality, to ensure availability of sufficient agricultural land for farming is of crucial importance.

4.3 There is an existing mechanism to protect agricultural land under the statutory planning system. On the basis of the advice from Government departments, agricultural land is designated as “Agriculture” (“AGR”) zone with an intention to retain and safeguard good quality agricultural land for agricultural purposes. The “AGR” zone is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes.

4.4 Only agricultural use and some compatible rural uses such as on-farm domestic structure, ancestral hall, rural committee/village office are always permitted while some other common uses in the rural areas such as New Territories Exempted House, place of recreation, sports or culture, school etc. and temporary use not exceeding three years would require planning permission from the Town Planning Board (TPB). Moreover, unauthorised development is subject to enforcement action of the Planning Authority

Figure 18: Revised Master Schedule of Notes

| <u>AGRICULTURE</u> | |
|---|---|
| Column 1 Uses always permitted | Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board |
| Agricultural Use Government Use (Police Reporting Centre only) On-Farm Domestic Structure Public Convenience Religious Institution (Ancestral Hall only) Rural Committee/Village Office | Animal Boarding Establishment Barbecue Spot Burial Ground Field Study/Education/Visitor Centre Government Refuse Collection Point Government Use (not elsewhere specified) House (New Territories Exempted House only, other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes) Picnic Area Place of Recreation, Sports or Culture (Horse Riding School, Hobby Farm, Fishing Ground only) Public Utility Installation Religious Institution (not elsewhere specified) School Utility Installation for Private Project |
| <u>Planning Intention</u> | |
| This zone is intended primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. | |
| <u>Remarks</u> | |
| (a) Any filling of pond, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the interim development permission area plan without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance. | |
| (Please see next page) | |

| <u>AGRICULTURE (Cont'd)</u> |
|--|
| <u>Remarks (Cont'd)</u> |
| (b) Any filling of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft Lung Yeuk Tau and Kwan Tei South Outline Zoning Plan No. S/NE-LYT/10 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance. This restriction does not apply to filling of land specifically required under prior written instructions of Government department(s) or for the purposes specified below: <ul style="list-style-type: none"> (i) laying of soil not exceeding 1.2m in thickness for cultivation; or (ii) construction of any agricultural structure with prior written approval issued by the Lands Department. |

for areas previously or currently covered by DPA Plan or the replacement OZPs. Any filling of land/pond requires planning permission from the TPB except for laying of soil not exceeding 1.2m in thickness for cultivation. Apart from “AGR” zone, agricultural use is usually always permitted in rural areas under various zonings including, for example, “Green Belt” zone, “Conservation Area”^λ zone and “Village Type Development” zone.

4.5 However, as most agricultural land is under private ownership (about 78% of all agricultural land), the commitment of these land for agricultural use or otherwise is solely in the hands of the private landowners. It is not

^λ ‘Agricultural Use (other than Plant Nursery)’ is always permitted under “Conservation Area” zone.

uncommon that these private landowners will either rent out their lands for other economic uses which can earn them higher financial return or let their lands lie idle in the anticipation that their lands will be acquired at good prices by private developers for residential development. Even when they rent out their lands for agricultural use, the tenure is usually short, therefore hindering farmers' willingness to invest on the farm to enhance and improve production. Insofar as sustaining local agriculture is concerned, availability of agricultural land is the key issue that require serious attention.

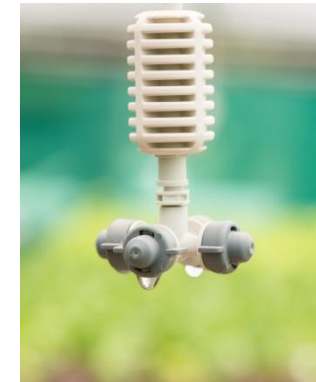
- 4.6 Under the Agri-Park initiative of the NAP, the Government intends to acquire land for its establishment through resumption of private farmland as there is no Government-owned farmland of suitable size for such a purpose. The Government will provide necessary infrastructure such as access roads and footpaths, irrigation, drainage and sewerage systems, power supply, and facilities for collection and recycling of agricultural wastes.
- 4.7 The establishment of the Agri-Park will be a key step to facilitate the upgrading and modernisation of the agricultural sector by creating an environment conducive to the nurturing

of new agro-technology and agro-business management. Innovative practices researched in and tried out in the Agri-Park would need to be given scope for application on a wider scale outside the Agri-Park, in order to create impact and induce productivity gain in the agricultural sector as a whole.

However, it will not be conducive to the further development of the agricultural sector if agricultural land outside the Agri-Park remains scattered, fallow, under-utilised, short-leased and susceptible to conversion to other incompatible uses.

- 4.8 In tandem with the development of the Agri-Park and in response to calls for better protection and utilisation of existing farmland, the Government will commission a consultancy study to examine the feasibility of identifying clusters of farmland in the New Territories that have higher value and potential for agricultural activities as Agricultural Priority Areas (APAs), with a view to preserving them for and incentivising the owners to put their land into long-term

Figure 19: Sprinkler in hydroponics farm



agricultural uses. An APA should generally have a high concentration of active as well as fallow agricultural land, accessible by road, provided with established agricultural infrastructure, and designation of which would have no adverse impact to the rural environs, environment and ecology. The consultancy study should cover recommendations on the locations and scope of APAs. It will be jointly overseen by FHB and the Development Bureau to ensure that this initiative, if taken forward, can achieve the objective of promoting the development of local agriculture, whilst complementing better long-term planning and management of land use at the urban-rural fringes.

4.9 In the planning of new development areas (NDAs), active or fallow agricultural land may be affected. Currently, an approach of integrating the urban, rural and natural environment is adopted in the planning of NDAs, with a view to preserving agricultural land, in particular, those of good quality. In the planning of the Kwu Tung North and Fanling North NDAs, a 37-ha Nature Park, and 45 ha of “AGR” zone in Long Valley and another 12 ha of “AGR” zone in Fanling North in the midst of the NDAs showcase the harmonious blending of urban and rural developments. If the agricultural land is inevitably required for development, a

Special Agricultural Land Rehabilitation Scheme will be adopted to help the farmers. Priority assistance will be offered to match the affected farmers to landowners who are willing to lease out the land for agricultural resite/rehabilitation. For the affected livestock farms, the Government will follow the prevailing policy in dealing with the clearance and compensation arrangements, and provide assistance to the affected operators as far as possible.

Figure 20: Hydroponics green vegetables



Increasing Business Viability of Farming

4.10 Apart from promoting modernisation of the local agriculture to enhance farms’ competitiveness, assistance in marketing and branding of local agricultural crops may be equally important to increase the revenue for local farmers. Nowadays, health-consciousness is an important issue for urban dwellers. There is a market for promoting fresh and

safe local agricultural produce in Hong Kong. While ordinary farmers do not have the expertise in marketing and the channel/outlet to sell their products direct to customers (so as to save the cost of middleman), the Government may consider facilitating the establishment of regular farmers' market at suitable venues in the urban areas. The Government will strengthen and/or re-position the VMO in the marketing of local agricultural produce, and also explore additional marketing channels for locally-produced vegetables. Aside from farmers' markets, new retail or online order collection points, as well as facilitating development of other new initiatives by non-governmental organizations or social enterprises could be considered, with funding support from SADF where appropriate. Additional marketing channels would help attain a sustainable local agricultural sector.

4.11 In addition, promoting ancillary uses of production farms could also help diversify and increase the income sources of farmers. The Government is exploring positive means to promote auxiliary activities to production farms such as education and farming experiential activities, on-farm selling of produce and simple processed food such as fruit jam and juices made from fresh produce.

Figure 21: Some on-farm selling products in Hong Kong



Incentivising Land Owners to Rent Out Their Land for Agricultural Use

4.12 Some landowners would prefer leaving their farmland fallow rather than leasing out for farming use because of the low rental return and the potential difficulty or delay if they later wish to terminate the tenancy for other alternative uses of the land. In cases where tenancy agreements have been reached between the landowners and farmers, the tenancy tenures tend to be relatively short such that farmers might not be able to recover their investment within the tenure. Since farmers in such circumstances might be less than willing to commit in long-term investment, it stifles aspirations to improve the farming facilities. This could have been one of the factors hindering the further

development of local agriculture.⁽²⁾

4.13 The unwillingness of landowners to rent out their farmland for cultivation has significant implication on the availability of agricultural land. The identification and designation of APAs, the feasibility of which will be studied, may help ensure the availability of good quality agricultural land for farming. It will help dampen the land owners' speculation about the potential for development of their land, as they will be aware that the land designated as APAs will primarily be allowed only for agricultural use. It is also necessary to explore measures to incentivise the land owners to rent out their land for farming use.

Conclusion

- 5.1 Despite its small contribution in fiscal terms, the local agricultural sector, helps to diversify our economy and more importantly ensures a safe and reliable source of food. As a prime sector in primary production, local agriculture should continue to be developed and supported. Under the NAP, the Government has pledged to facilitate the modernisation and sustainable development of local agriculture. With availability of farmland as the crux of agricultural development, apart from the development of Agri-Park, a consultancy study will be commissioned to explore the feasibility of designating APAs and possible measures to incentivise land owners to rent out their land for agricultural use.
- 5.2 Under the planning regime, while the quest for housing and economic land is the driving force for the development of NDAs, agricultural land, particularly those of good quality should be preserved and integrated in the NDAs with a view to protecting agricultural land for agricultural uses, which in turn help enhance liveability and environmental capacity of our dense city. The approach of the urban, rural and nature integration has been adopted in the planning of

various NDAs and should be continued to be explored in future development proposals in the New Territories.

ENDNOTES:

- 1 Census and Statistics Department - National Income, <https://www.censtatd.gov.hk/hkstat/sub/sp250.jsp?tableID=036&ID=0&productType=8#N3>
- 2 Agriculture, Fisheries and Conservation Department Consultation Document - The New Agricultural Policy: Sustainable Agricultural Development in Hong Kong, https://www.afcd.gov.hk/english/whatsnew/what_agr/files/consultation_on_agricultural_policy.pdf
- 3 Agriculture, Fisheries and Conservation Department Hong Kong Fact Sheets - Agricultural and Fisheries, <http://www.gov.hk/en/about/abouthk/factsheets/docs/agriculture.pdf>
- 4 Produce Green Foundation - Organic Farming, http://www.producegreen.org.hk/eng/agronomy_e.htm
- 5 Agriculture, Fisheries and Conservation Department - Organic Farming in Hong Kong, https://www.afcd.gov.hk/english/agriculture/agr_orgfarm/agr_orgfarm.html
- 6 The University of Arizona - Controlled Environment Agriculture Centre, <http://ceac.arizona.edu/hydroponics>
- 7 Vegetable Marketing Organization, http://www.vmo.org/docs/document/Annual%20Report/12_13%20Annual%20Report.pdf
- 8 Food and Agriculture Organization of the United Nations, <http://www.fao.org/3/a-i4021e.pdf>
- 9 Agriculture, Fisheries and Conservation Department – Farmfest, http://www.afcd.gov.hk/english/agriculture/agr_useful/agr_useful_farmfest/agr_useful_farmfest.html