



Land Surveying Division  
Sr Paul Tsui LSD Council Chairman

## Sustainability and Land Surveyors

As you may know, the HKIS has established a new Working Group on Sustainability. Its main objectives are to promote the involvement of surveyors in sustainability-related works and educate the public, the Government, and potential clients on the importance of surveyors' participation in sustainable development.

Sustainability has become increasingly important at all levels – global, national, organisational, and personal – to counteract the extreme weather brought about by climate change. Development is a basic need for humans, who need to convert more land for shelter and grow food for an expanding population. How can a society keep developing while also preserving its environment? Hence, sustainable development is the key challenge for everyone, especially surveyors, who are property and development professionals.

Since sustainability is an abstract and broad topic, the United Nations (UN) has set out 17 sustainable development goals (SDGs, Figure 1) in its 2030 Agenda for Sustainable Development,



Figure 1: 17 Sustainable Development Goals Defined by the UN

which is an urgent call for action by all countries in a global partnership.

What is the role of land surveyors in sustainability, then? They collect, analyse, and share SDG data for planning, policy, and decision-making purposes using geospatial technologies. The GIS that land surveyors specialise in plays a fundamental role in creating and sharing SDG data, as well as informs policy formulation and decision-making around sustainable development programmes and investments.

The first example is the United Arab Emirates' SDG Data Hub (hereafter the HUB), which serves the purpose of tracking, monitoring, and reporting milestones, while progressing towards the implementation of the SDGs by the UAE Cabinet and UN Department of Economic and Social Affairs. The HUB aims to solve the data reporting challenge by making data accessible and easy to visualise for decision makers. It further serves as an awareness tool to raise, educate, engage, and build whole-of-society capacity towards the SDGs with calls



Figure 2: UAE SDG Data Hub Groups' SDG Open Spatial Data by Goal

to adopt sustainable living. The open data on the SDG indicator data at the UAE level can be downloaded in various formats and explored on an interactive map via the HUB (Figure 2). Data stories present significant data at the national and UAE levels in a storytelling method using Storymap and instantly engage societies with relevant topics.

Commercial organisations can also contribute to world sustainability by incorporating SDGs into their plans. One example concerns renowned coffee producer company, Nespresso. It strives to grow the best quality coffee bean by developing its AAA coffee farms to cope with the growing worldwide demand for its coffee capsules, while preserving the environment surrounding its farms with the help of GIS and location intelligence (Figure 3). This is an excellent real-life example of achieving sustainable development via geospatial technologies.



Figure 3: Nespresso's Use of 3D GIS and Satellite Imagery to Inventory its AAA Farms and Associated Land Boundaries

Below is a video illustrating how Nespresso uses GIS and location intelligence to facilitate its global sustainable farming operations.

<https://youtu.be/3kXJmgzAEI?t=1124>

Hong Kong also has examples of geospatial technologies used to promote sustainability. Sr Prof Charles Wong has used remote sensing, including satellite imagery, to study urban heat island effects, urban environmental quality,

vegetation, ecosystems, and solar energy potential. He also applies GIS to analyse wind ventilation corridors in urban settings.

Launched in 2016, the Jockey Club Water Initiative on Sustainability and Engagement (JC-WISE) is a project funded by the Hong Kong Jockey Club Charities Trust and hosted by HKU's Faculty of Social Sciences. Through cross-sectoral collaborations, JC-WISE aims to raise the public's awareness and appreciation of Hong Kong's need to attain its long-term water sustainability goals. It established an interactive open-access, GIS-based database (<https://www.jcwise.hk/gis/>) on Hong Kong's major rivers and associated river basins to enhance the public's knowledge and appreciation of water's multiple values. The database covers the multiple dimensions of the city's major rivers and river basins including their historical, geophysical, hydrological, and socio-economic data. Figure 4 is a Storymap showing the Lam Tsuen River catchment.

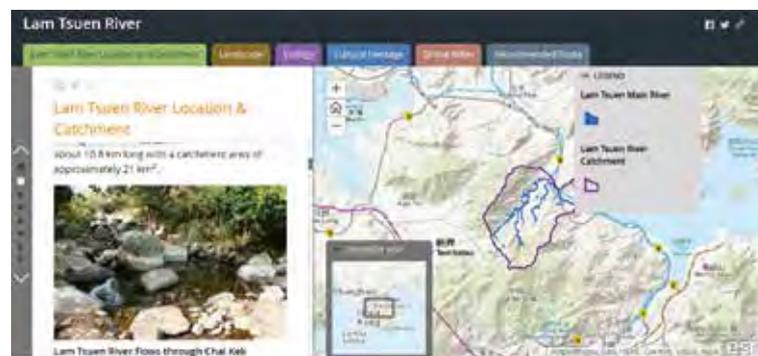


Figure 4: JC-WISE Project Using Storymap to Show the Lam Tsuen River Catchment

Finally, GIS and location intelligence are indispensable for achieving SDG whether it is at the global, government, or organisational level. Land surveyors specialising in spatial data and GeoIT play key roles in advising and helping governments and organisations achieve their SDGs via geospatial data and technologies.

## Collection of Membership Diploma

Recently, one member asked me why he had not received his Membership Diploma ever since he became a corporate member a few years ago. Normally, the HKIS will not send diplomas to its new members. Instead, it will send the member a letter or e-mail inviting him/her to attend the diploma presentation ceremony. Those who cannot attend the ceremony can collect their diplomas from the HKIS office at their convenience. As of this writing, there are still some LSD members who have not collected their diplomas. They should do so as soon as possible because the diploma is official proof of one's professional status. Please call the HKIS to find out its opening hours during the pandemic before you come.

## Free CPD Events for HKIS Members

Covid-19's fifth wave has hammered the industry in recent months. During this tough period, members working in different sectors have stood fast in their respective roles to continue serving the public. The professionalism they have displayed is worthy of everyone's respect. To further strengthen its response to support HKIS members for the remainder of the pandemic, the LSD will waive the fees for the following CPDs. Please scan the QR Codes for details:



Speaker: Sr Yvonne CHEU  
Event Date: 21 April 2022



Speaker: Sr Joseph Wong  
Event Date: 19 May 2022

Let's walk hand-in-hand and surely we will ride through the difficult times.

SUBSCRIBE TO HKIS  
YOUTUBE CHANNEL



 THE HONG KONG INSTITUTE OF  
SURVEYORS

香港測量師學會

[www.youtube.com/TheHongKongInstituteofSurveyors](http://www.youtube.com/TheHongKongInstituteofSurveyors)