



Ensure availability and sustainable management of water and sanitation for all

### Education

The topic of water sustainability, including drinking water, sanitation, and hygiene, is closely tied to our everyday lives. Various courses are provided to students at HKBU to enhance their understanding of clean water and sanitation. Some of these courses are:

- BIOL3015 Ecology Laboratory
- CHEM4006 Environmental Chemistry and Pollution Control
- CHEM4017 Environmental Analysis
- GCST2016 Sustainable China: Environment and Development Issues

**Do you know??**

Water is essential for life. HKBU ensures quality freshwater is accessible to every student and staff within our campus. We have set up **16** water dispensers on campus to cultivate sustainable culture and encourage students to minimise single-use plastic bottle waste.




### Event

#### Green Quest - Field Training at Mai Po Nature Reserve

As wetland has been identified as the world's largest source of drinking water, either directly or indirectly, studying the ecosystem of a wetland is thus beneficial to understanding sanitation. Under the guidance of WWF-HK, our students visited the Mai Po Nature Reserve and studied the importance of wetland in maintaining biodiversity to promote sustainable development.





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**Research**

**More Drinkable Water, More Food? Why Not Both?**

As a range of experts over the world are looking for water-saving irrigation regimes, researchers at HKBU are also eager to tackle this significant problem. While rice production has been scaled up to meet the demand of the rising population, the problem of water shortage has been worsening. Professor Zhang and his colleagues tried to address the water-use efficiency (WUE) by applying one of the suggested technologies, alternative wetting and drying (AWD). Applying moderate AWD can increase both grain yield and WUE, and this research helps seek possibilities of increasing WUE to ensure water availability and sustainable management of freshwater.

**Research**

**Influence of Livestock Activities on Residue Antibiotic Levels of Rivers in Hong Kong**

In light of the widespread use of antibiotics in livestock farms, the presence of antibiotics in sewage and even coastal waterways has been recorded worldwide. As a university that cares about our society, HKBU and our researchers also conducted research to investigate the antibiotic levels of Hong Kong rivers. A research team led by Professor Kelvin Leung obtained data on antibiotic occurrence in selected Hong Kong rivers to assess the overall health of the inland rivers.



**Professor Kelvin Leung**  
Department of Chemistry

**Academic in Spotlight**

Professor Zhang is the Associate Vice-President (Global Research Collaboration) and Chair Professor of Plant Biology at HKBU. Starting from January 2020 to June 2022, he had been leading a General Research Fund project of breaking the barriers of grain filling using novel mutant resources. Moreover, Professor Zhang is an expert in plant stress physiology and water-saving cultivation of field crops. In December 2008, he was chosen as "Five crop researchers who could change the world" by the prestigious scientific journal *Nature* for his research on water-saving irrigation in China. Professor Zhang was also given the State Council of China's State Natural Science Award and the State Scientific and Technological Progress Award.



**Professor Zhang Jianhua**  
Department of Biology  
Associate Vice President  
(Global Research Collaboration)

