

## **Small Area Estimation for the 2011 Population Census of Hong Kong**

John HK Lam

Census and Statistics Department, Hong Kong, China

[jhklam@censtatd.gov.hk](mailto:jhklam@censtatd.gov.hk)

In the 2011 Population Census of Hong Kong, a sample of households were required to provide detailed data on social and economic characteristics in addition to basic demographic information such as age and sex using a long-form questionnaire and the rest of households were only required to provide basic demographic information using a short-form questionnaire. The population count and the key profile of the population were compiled based on the basic demographic data collected from all households. For the more detailed analysis on social and economic characteristics of the population, estimation was performed by means of ratio estimation method using the benchmark data on key characteristics. In order to provide small area estimates on one hand and at the same time the estimates at the aggregate level are consistent with independent administrative data sources, a modified Generalised Regression Estimation method (with calibration estimation process) was used.

**Key Words:** Generalised regression estimation