

摘要

全臺早期農地重劃區約占 27.8 萬公頃；本研究以新竹縣為例，由理論推估法及實測比較法分析其地籍圖精度，同時了解差額地價問題，冀作為複丈或釐整地籍之參考。

本研究通過釐清測繪當時所使用之方法、程序及其精度規範，由誤差傳播定律，推估其理論精度；並以實地經界及原重劃規劃、分配之設計邊長，逐筆推求出實驗區內 2,593 筆宗地界址點之實地坐標後，按位置、邊長及面積三方面與數化地籍圖比較，探討其實際精度。

研究結果顯示，早期農地重劃地籍圖實際精度與理論推估結果差距甚大，無法符合複丈之精度要求，建議儘速採重測手段釐整；而面積增減及差額地價問題，並非難以處理，無庸過於顧忌。此外，另歸納出許多對於複丈或釐整地籍有所幫助的資訊。

關鍵詞：農地重劃、地籍測量、地籍圖、土地複丈

Abstract

There were about 278,000 hectares of farm land consolidations early in Taiwan. The theoretical inference method and field check method were used to analyze the precision of cadastral maps in the research and Hsin-Chu county was chosen as a case study region. The differential land values were also accounted and hopefully that can be cited as inferences of land revision or cadastral survey.

The theoretical accuracy was estimated with the method of error propagation after verifying the methods and procedures of measurement used and the regulations for precision requirement. In the mean time, the coordinates of 2,593 ground boundaries were obtained in the study region by considerations of the principle of consolidation, re-distribution regulations and real ground boundaries. The coordinates of the boundaries of parcel in analog cadastral map were also obtained by digitizing. The two types of coordinates were compared each other in the location, side length and area of the parcel.

It is very obvious that there were large differences between cadastral maps and theoretical estimations in the region. It also cannot meet the requirements of land revision in precision and it is necessary to cadastral resurvey completely. The problems of the differences in area of parcel and the differential land values can be solved with compensation supported by the foundation of farm land consolidation and will not be an obstruction in the progress. In addition, some useful methods for land revision and cadastral survey were generalized.

Key words: Farm land consolidation, Cadastral survey, Cadastral map, Land revision